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THE RESERVE BANK AND MONETARY STABILITY

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The Reserve Bank and Monetary Stability.

The preamble to the Reserve Bank Act uses the wider term "monetary stability," instead of the narrower and more precise term "monetary policy." Indian commentators have been using it in the sense of internal and external stability of the value of the monetary unit. This is indeed a very narrow meaning of the term. Even the difficulties of securing these are not properly understood by these commentators.[1]

Monetary stability has several meanings. It might mean different things in different contexts. The words "inflation," "deflation," "devaluation" and "reflation" have had their innings. They have retired into obscurity. They have been eclipsed by the new term "stabilisation."

Monetary stabilisation has been a very enterprising idea actuating people to undertake collective action. Although this term has been applied quite recently the inspiring and underlying idea of it has been a very old one which has been exercising powerful influence on the mentality of economists. It is indeed a century-old conception.

1 This paper forms part of a Lecture delivered by the author before the Bengal Economic Society. *April 7, 193*Linlithgow

This perennial quest for " sound money " or stable money has exercised a singular fascination on all thinking minds. Unfortunately the compounded energies of many minds have failed to accurately define the principle, motive and method of monetary stabilisation within the compass of a simple and all-comprehensive formula. Though nearly a hundred years old the doctrine of monetary stabilisation has not been accurately defined. Mr. P. W. Martin would have us believe that there are four types of monetary stability, exchange stability, business stability and price stability.[2]

There are other economists who consider stabilisation of money incomes as essential. Stable money incomes might tend to economic stability. Economic stability is a much wider term and includes " more than what is usually meant by monetary stability"[3]

Some of the modern economists opine that stabilisation is not the accurate word to be applied to exchanges. They suggest that the term " synchronisation " should be used with reference to the movement of exchange rates. This attempt is evidently to clarify the meaning of the phrase " monetary stabilisation." If the above suggestion were to be accepted monetary stabilisation need not be understood in the sense of stabilisation of exchanges. But the long-established popular usage has to be respected. The term " stabilisation " has been applied to prices, exchanges, money incomes, business and general economic conditions. The precise meaning of the above terms would have to be grasped before any clear appreciation of the issues involved in attaining monetary stabilisation can be achieved. Stabilisation of prices at a new level equitable to the producer and consumer alike has been the most significant cry during the days of the recent world economic depression. It has once again brought to the forefront the time[4]-honoured quest for sound and stable

2 See P. W. Martin, " The Problem of maintaining Purchasing Power " p. 178.

3 Economic stability means the avoidance of excess in every department of economic life. Economic balance between the different types of production, psychological balance on the part of the employer and employee, of producer and the consumer, of promoter and investor; balance between the destruction of natural resources and their restoration, balanced remuneration, balanced progress—in short an avoidance of excess in every department of economic life. Monetary stability is meant absolutely towards the attainment of this many-sided balance. See P. W. Martin, " The problem of maintaining Purchasing Power " p. 255.

4 Since the days of the English economists—Lowe and Scrope, the suggestions to realise stable money were being outlined. Bimetallism, Symmetallism, a Tabular Standard, the Compensated Dollar, central banking management with the price-stabilisation discount policy as its ideal, an improved international gold-

money which alone can hope to eliminate violent fluctuations in the price-levels, exchange rates, and business conditions.

Now that a reform of our banking method and system is being inaugurated by the formation of a Central Reserve Bank it is essential that the difficulties attendant on the stabilisation programme should be understood. The various suggestions for securing the different types of monetary stability would have to be examined. Any plan for securing any type of monetary stability would be an impossible ideal to be achieved in this constantly changing world by almost imperfect means. Monetary influences act and react on the other economic walks of life. A Central Bank can actively control and deliberately direct in an intelligent manner the monetary influences. The efforts of the C. Bank should be exerted in the direction of achieving the different desirable types of stabilisation which are considered essential to the maintenance of economic stability of the country.

Stabilisation of Exchange.

In the nineteenth century when the gold standard system was in operation all the important countries of the world stabilisation meant the stabilisation of exchanges. Fixed gold exchanges were considered essential. The Gold-exchange standard device was perfected to confer the advantages of exchange stability on the silver and paper-using countries. The breakdown of the gold standard during the Great War led to disorganisation of exchanges. Various measures were adopted to secure tolerably fixed exchanges for exchange instability caused havoc in several important directions. What adverse results[5] Indian economic conditions experienced during 1870 to 1892 as a result of falling exchange rates, the world in general experienced similar economic difficulties when general exchange instability was the prevailing feature during the years 1914-20.

A correct understanding of economic theory enables us to realise that fluctuating exchanges tend to produce the following adverse consequences. The breakdown of international trade,

exchange standard and international central banking cooperation with the view of stabilising even the long-period value of gold have been some of the significant suggestions for putting an end to monetary instability. As a matter of fact several of these plans have been collected by several writers. Now that *managed non-metallic non-international currency* is fast becoming the order of the day the meaning of the concept of monetary stabilisation, its technique, its economic necessity and the difficulties in its path have to be understood.

5 See Karl Elstatier, "Effects of fluctuating exchanges on Indian Economy."

currency deterioration, compensatory tariffs, quotas and flight of capital would slowly arise if fluctuating exchanges were to prevail for a sufficiently long time.[6] "Calamity booms" and "improvement depressions" follow in rapid rotation as in Germany during the eventful years 1920-1925.[7] When the value of the German mark fell in post-war days of hectic inflation Germany was forced to work overtime to fill export orders. As soon as internal prices rose to the level of world prices workers became idle and industry became depressed. Fluctuating exchanges meant fluctuating economic conditions. Business generally loses its genuine character and becomes no better than mere speculation in the exchanges.[8] An oscillation of exchanges would create an unending source of anxiety to manufacturers who depend on foreign raw materials for the production of the home currency. When the foreign exchange rates fluctuate in the opposite direction[9] the domestic manufacturer would be in a dangerous position. Domestic production also is seriously assailed as a result of foreign competition arising out of unforeseen exchange movements.

Other effects of fluctuating exchanges.

Banks which become closely allied to such industries suffer greatly from the consequences of unstable exchange.[10] The fiscal problems of a country suffer mainly as a result of uncertainty created in the matter of external payments.[11] The Indian budget which is usually rendered vulnerable by huge external charges amounting to 50 crores a year tends very often to become a gamble in exchange. Sir Guy Fleetwood-Wilson designated it as not only a "gamble in rain but also as a gamble in exchange". Germany defaulted in the matter of reparation payments as the exchange value of the mark fell to a low height. The tremendous decrease in the external value of the paper mark made it well-nigh impossible to convert the accumulated paper marks into gold exchange. Unsteady exchanges deter the free flow of long-term capital movements into the country as a result

6 Vide Seligman, "Currency Inflation and Public Debts," p. 59.

7 See Dr. Freidman, "International Financial Reconstruction," p. 343.

8 See J. M. Keynes, Tract on Monetary Reform, also Economic Consequences of the Peace, p. 243.

9 See Ruth M. Jacgar, The Stabilisation of Exchanges, pp. 138 and 139.

10 See Freidman, International Financial Reconstruction, p. 344.

11 See L. L. B. Angas, Reparations, Trade and Tariffs.

of uncertainty of return. It was the earnest idea of putting an end to such difficulties which made the Anglo-Indian capitalists agitate for a fixed exchange level for the rupee. The present European financial breakdown of 1931—1935 has led to disorganised banking systems. Exchange controls were resorted to secure the bare necessities of life and reduce the volume of unnecessary external debts. Exchange controls lead to exchange speculation and the speculators begin to dabble in free and excessive imports and exports of foreign and domestic currencies. International bankers dislike fluctuating exchanges as these would tend to wipe off their narrow margin of profits which usually arises out of a small difference in interest rates.

Recent attempts to stabilise exchanges.

Both at the Ottawa Economic Conference of 1932 and the World Economic Conference of 1933 plans for stabilising exchange rates were discussed. Prime Minister Bennett of Canada wanted an Empire Exchange Pool to stabilise exchanges within the Empire. "A credit fund of half-a-billion dollars would suffice" said he to secure the above objective.

At the World Economic Conference held in 1933 stable exchange rates of the *Franc*, the *Dollar*, and the *Pound sterling* were considered necessary. A tripartite exchange equalisation fund was to be started to achieve the above objective. The plan was rejected by President Roosevelt in favour of his own scheme of reflation and stabilisation.[12]

The Three Power pact.

At the present sittings of the International Chamber of Commerce (June 1935) held in Paris the idea of stable exchange rates by linking them to a gold basis was once again accepted as an essential condition for world economic recovery.[13] In order to controvert the widely-held view that stabilisation of exchange would be ineffective[14] and even harmful in the present

12 *Vide* his address and message to the World Economic Conference June 21, 1933.

13 See Dr. Gregory's Paper on stabilisation submitted to the 8th Session I. C. of C.

14 As the world is in a state of chaos the desirability of exchange stabilisation becomes a matter of doubt. Without removing the main economic evils of the world a temporary fixing of exchange would lead to another breakdown alone. The needed financial resources to maintain stable exchange parities are not to be had. There is no freely functioning exchange market as yet and "blocked balances"

disturbed conditions of the World the International Chamber of Commerce has once again issued a series of essays recommending early stabilisation of exchanges. The three power pact adopted currency stabilisation. A progressive stabilisation of exchange rates on the part of the three leading countries has already led to the removal of import quotas and other protectionist devices which arose on account of currency instability. The success of economic planning schemes depends on the stabilisation of the exchange rates. Realising full well that the forward exchange market has not after all eliminated the risk of fluctuating exchange rates a stabilised exchange is being once again recommended. Economic conditions therefore favour the early stabilisation[15] of exchange rates so that the evils arising out of monetary instability can be removed.

The meaning of external stability.

There are some experts who have drawn a useful distinction between external stability and exchange stability. External stability might be understood in the sense of (a) exchange stability (b) stability of external price-level (c) an equilibrium in the balance of payments (d) zero gold exports from the country. It is easily apparent that these stabilities fail to secure the much-needed industrial stability of the country. But a country depending on commerce and trade would care much for these types of external stability.[16]

and other temporary devices to control exchange still prevail. After all the monetary exchanges of a few nations are not so important as the real and permanent financial stability of the masses and this cannot be established without business or economic stability. A stable price-level and a soundly balanced economic system are very important for the country. See "The Future of Monetary Policy."

15 The Committee of experts and the economists of the International Chamber of Commerce report that "the existing exchange rates show already some amount of stability. Interest rates have been largely adjusted to a new level. The prices of staple commodities themselves show signs of rising rather than of falling tendency, the fall in interest rates is beginning to stimulate long-term investment, the volume of indebtedness incurred in the past is being liquidated on an imposing scale and the terror of an imminent shortage of gold stocks and the increase of gold output." Hence it advocates an early stabilisation of currencies based on gold.

16 Dr. L. J. A. Trip, Ex-Governor of the Bank of Java, says "If one has to choose between stable exchange rates and a fluctuating price-level and a stable price-level without stable exchange rates it would undoubtedly be in the interests of commerce and trade and of an adequate adaptation of national price-levels to choose the former." See Paper on International Price-level Adjustment. The Gold Delegation Committee Papers. The League of Nations, Documents, p. 86.

Means for Securing Exchange Stability.

The traditional pre-war method was to buy and sell gold at fixed statutory prices so that the margin is fairly narrow.

Nextly, foreign currencies can be sold and bought at particular rates by the central bank. This war-time method can exist side by side with the former. This leads to the pegging of the exchange rates.

Finally, the long-term exchange stability requires that the parities between the two currencies chosen should conform to the cost and income structure of the national economics. The selection of the right parity is indeed a long and difficult process. There is no clearly defined purchasing power parity which can be deduced from a glance at a few simple statistics. Small adjustments from this par can be made from time to time conforming to changes in prices and costs.

The Reserve Bank is obliged to buy and sell sterling at the selected rates, *viz.*, 1s. 6 and·3/16d. and 1s. 5 and 49/64d. This would fix the exchange value of the rupee between the two limits. So long as the Reserve Bank has ample resources of sterling as well as the rupees it will have the ability to maintain the selected rate.

Stability of Prices.

Prior to the recent war-time the ideal of stable price-level was not a very popular conception. Owing to the narrow range of fluctuations in the price-level attention was not drawn to this problem. This doctrine of stable price-level gained adherents.[17] Both the Ottawa Conference and President Roosevelt's monetary policy[18] aim at the reasoned management of currency with the view of stabilising internal prices. There have been other advocates recommending the stabilisation of world wholesale prices of foodstuffs and raw materials entering into international trade. The Macmillan Committee emphatically stated that "without stability of world prices there can be no stable exchanges or internal prices" however desirable they might be.[19]

17 See Irving Fisher, Stable Money.

18 See Sir Charles Morgan-Webb, The Rise and Fall of the Gold Standard, also his book "Ten Currency Revolutions."

19 See the Macmillan Committee Report, page 114. It says that a high degree of precision is neither needed nor necessary in the matter of world price-level

Vagueness of the data.

The much-needed economic data for stabilising the world price-level[20] has not been suggested and accepted by the different countries. While a "consumer's price index" is to be utilised to control the currency of the different countries it has to be kept in equilibrium with the international currency operated on a Production Price Index Number. The international currency management is to be done by the economically powerful countries such as Great Britain or America. But there has been no unanimity in the actual Price Index to be settled or the equilibrium point at which it has to be maintained or the amount of divergence which has to be permitted before corrective action can be taken and what type of uniform action has to be taken by the different countries if the world price-level were to be changing from the present limits.

No unanimity concerning means.

If there is some amount of vagueness in the above-mentioned directions the agencies to be employed and the means to be adopted for securing stability of the world price-level are definitely settled. Some have suggested that the Bank of International Settlements should be converted into that of a super-Central Bank and its discount rate should be used as a means to stabilise the world price-level. There should be frequent Conferences of the Central Banks,[21] and the important World economic powers such as England and America[22] would have to meet frequently so that

20 The late Sir Charles Addis said "Stabilisation of prices is not a national but an international problem. The Bank of International Settlements has to apply its collective wisdom and experience in finding out a plan for mitigating or curing the instability of the monetary machine."

21 There would be great necessity for International Central Banking Cooperation specially in times of international instability. There should be cooperation between the different Central Banks so that world prices might be stable. If a powerful financial country were to pursue a cheap money policy it tends to raise the world prices in due course of time. A more effective international monetary system would not only prevent such individual aberrations but bring about thorough economic cooperation between the different countries. This economic cooperation has to be pursued in four ways, (a) continuous collaboration in discount rate policies (b) the pooling of gold reserves (c) the interchanging of Central Bank's credit and (d) a more effective clearing of current international debts and tariffs.

22 Prof. J. R. Commons presumes that America is strong enough to control the world price-level. That America is a chief creditor country is no longer denied. It has a large amount of foreign trade. Her stocks of gold are indeed very large. Without Anglo-American cooperation nothing can be accomplished. That is the sole reason why Reginald Mckenna, Keynes and Viscount George Peele recommended this course of action to stabilise the world price-level. But this suggestion has failed to appeal to both the countries.

by their cooperation they can easily maintain the world price-level.

Standing obstacles in the path.

But this conception has been almost given up as international currency cooperation has become almost an impossibility after the failure of the World Monetary Conference in 1933. Monetary autonomy is considered a priceless treasure and few countries are willing to place this power of monetary regulation in the hands of an International Committee of monetary experts. Each country is bent upon pursuing an exclusively national currency policy.

A stable internal price-level.

Unable to secure joint cooperation in currency matters the ideal of internal[23] stabilisation of prices is being ardently pursued by most countries. The conception is to pitch upon "an equilibrium price-level" which would confer the following positive advantages (*a*) the restoration of normal activity and industrial employment, (*b*) the securing of economic return to the primary producer, (*c*) the harmonisation of the burden of debts and fixed charges with economic capacity. Having selected the equilibrium price-level there should be complete absence of monetary inflation or deflation by the currency authority so that comparative stabilisation of the Index Number at that level is forthcoming.[24] Currency is to be stabilised in terms of commodities and services as depicted by a General Purpose Index Number.[25]

23 It means the comparative stabilisation of internal prices first and then allowing the gold reserve questions to be more or less of a residual. At present the stability of the price-level is not considered as an object of Central Bank Policy. As Sir Joshiah Stamp says "it has been a chance residual of gold reserve, protection policy and international forces." This policy has to be altered for the former ideal where "price stabilisation is not a chance residual but a primary objective and gold reserve is a chance residual."

24 It is not absolute stabilisation of price-level as denoted by an unalterable Index Number that is advocated by anybody. See M. Jacques Rueff's paper entitled "Undue fluctuations of the Purchasing Power of Gold." Select Documents published by the Gold Delegation Committee of the League of Nations.

25 Any type of Index Number might be chosen. Some are for selecting wholesale prices, some retail prices indicating cost of living. As these are not thoroughly representative of the economic conditions a general purpose Index Number is being advocated.

Apart from eliminating violent fluctuations or changes in the standard of value and confining the variations to a narrow range of three per cent round the selected normal level of prices an attempt should also be made "to keep foreign exchange fluctuations within narrow limits."

Recent improvements[26] in the construction of the Index Numbers have undoubtedly strengthened the case for monetary stabilisation as understood in the sense of purchasing power over commodities. Since the Internal Financial Conference first voiced this ideal in 1922 it has rapidly become popular. Interests in this problem was roused in all countries. The calamitous fall in prices during the days of the Great Depression forced the issue once again.[27] The example of a few countries stabilising their cost of living Index has fired the imagination of other countries who aspire to achieve the same within their own territory.[28]

Means and Methods.

The issue of currency is to be regulated by means of an Index Number of General Level of Prices which result is carefully checked by other Index Numbers of production, employment, trade and the wage-level. No longer considered as a superhuman task attempts are being made in some financial centres and countries to stabilise the price-level by conscious human efforts. The management of the paper currency is to be attempted so as to maintain the stable price-level. Inconvertible paper currency managed nationally by changes in bank rate and open market operations and other methods of monetary control is the ideal to be striven for. Direct control over production and over the price-level by means of Government

26 See the Method of construction of the Index Number of the Riksbank. Bank of Sweden, Kjellstrom, Managed Money, see also Brinley Thomas, Money and Crises in Sweden.

27 The Report of the Columbia University Commission says that "intense human suffering was the direct result of the falling prices. Ruin to struggling manufacturers, idleness to labour, and changes in the wealth of the people were the outstanding evils. The campaign for monetary reform became strengthened. National as well as international rivalry has arisen on account of fall in prices. Stable exchanges and unstable prices led to occurrence of economic crises. A stable price-level (domestic or internal) has been considered essential for economic planning schemes to succeed."

28 See Sweden's ability to stabilise the actual price level. Kjellstrom "Managed Money." See also Brinley Thomas, "Money and Crises in Sweden."

action[29] is also suggested so that the price-level might be controlled. Even the control over the tariff is to be utilised as a means to control the price-level.[30]

Impossibility of achieving this conception.

Without in any way disputing the necessity of stable price-level it has to be realised at the outset that the price-level cannot be stabilised.[31] The following objections have been raised against the theoretical possibility of raising or lowering the price-level in a way to realise the equilibrium price-level always. It is almost forgotten that the price-level cannot be controlled by the manipulation of credit. The volume of credit is not susceptible of direct control. The price-stabilisation policy is incompatible with the maintenance of the gold standard. There is no satisfactory Index Number.[32] Mere stabilisation of the price-level cannot be considered as the sole all-comprehensive guide to the monetary policy of the Central Bank. A satisfactory Index Number which is fool-proof or knave-proof is not ordinarily available.[33] The stabilisation of prices against the consequences

29 All direct price maintenance schemes and output control schemes have everywhere failed. Legal price-fixing did not succeed except in limited cases for limited periods of time. The Brazilian Coffee scheme and the Stevenson Rubber scheme have not been an admirable success. The only possible exception is the Chadbourne Sugar Scheme but even this has not succeeded much in raising the price of sugar.

30 " Multilateral effects might follow the raising of the tariff " says Prof. Gregory. " The Tariff cannot serve as a monetary instrument unless it is being constantly adjusted to meet changes in the situation. It would create difficulties of its own."

31 In a constantly changing world it is impossible to accomplish this idea through almost imperfect means available to the bankers, statesman and economists. After all it means the elimination of tidal movements of general prices and wave-like movements of relative prices. " They have to be ironed out to mere ripple-like movements. Excessive peaks and slumps of the general price-level would have to be eliminated.

32 See O. W. Sprague, American Economic Review, March 1929. He emphasises that no such Index Number is adequate to denote changes in the value of the currency unit. Services, securities. labour and many other things have to be included to note how national expenditure is being spent. The means of measuring these changes are indeed imperfect for the present. See also Prof. Gustav Cassel, Post War Monetary Stabilisation, pp. 12.

33 " A sufficiently sensitive Index Number cannot be secured " says the Balfour Committee. " Moreover even if it were fairly representative at the start its basis would over a long period need periodical revision in order to conform to changing conditions. Nothing would convince the business world that in making such periodic revision the Government of the day would be free from political pressure."

of technological progress may involve creation of instability of productive activity.[34] Very serious maladjustments will arise similar to those witnessed during the years 1922-1928 in the U.S.A. No level of prices rising or falling or stationary may be advocated from the theoretical point of view. The progressive adjustment of costs to prices with the least possible friction is the desirable ideal in any progressive economy. Even granted that steady[35] prices accompany technological improvements and increased efficiency the resulting gains would have to be distributed in the form of higher wages and salaries. As the Columbia University Commission Report says " the essential problem is to adjust wages upward in line with increased productivity lest windfall profits and excessive profits might destroy the economic balance ".

Limitations on banking activity.

Above all there are several limitations on the ability of the Central Banks to stabilise the price-level.[36] Prof. Keynes has proved that it is much easier to preserve stability than to restore it quickly after disequilibrium has set in. Highly intractible non-monetary causes of instability intervene and these cannot be controlled. Strong social and political forces might cause changes in the money rate of efficiency wages and the control of the price-level may pass beyond the power of the banking system. So long as international instability exists a country adhering to the international currency standard can never hope to achieve a stable internal price-level. The banking system might not be after all powerful enough to establish equilibrium although it might be strong enough to preserve a stable price level. To secure a new

34 Dr. Marshall has therefore recommended the slowly falling prices accompanied by improvement in productive processes.

35 Dr. Miller of the Federal Reserve Board says that " an average of prices is a mere metaphysical concept, it does not mean anything. It has no counterpart in real life. It is a statistical summation of the movements of an infinite variety of commodities in a vast number of markets scattered over the face of the earth. Evidently he is against the use of the price-level as a sole dictator of the banking policy."

36 The bank rate theory of prices is no longer adhered to by modern economists. Dr. Edwin Cannan and Prof. Henry Clay point out " that banking action always follows and does not lead industry." " The bank rate is only a creature of circumstances and cannot be altered merely by the sweet will and pleasure of the Central Bank authority " says Dr. Cannan. Modern Currency, p. 86. Again this theory assumes the truth of the Quantity Theory of Money. So long as the spending habit of the public is a dark horse indeed the truth of the Quantity Theory would have to be questioned.

and stable equilibrium would mean long delays and unavoidable frictions.[37]

Evidence of practical banking administrator.

Another practical banker—the late Benjamin Strong argues against price-stabilisation as a matter of policy in the following manner.[38] The Central Bank management might deteriorate on account of internal friction, divided counsel and desire for personal domination.[39] The Treasury might intervene with the credit situation leading to an inflation of it. The reserve requirements of scheduled member banks might be altered by legislation thus tending to produce inflation. The Central Banks might not possess enough earning assets to buy all the uncontrollable and unavoidable importations of gold into the country. While it is easy to check the course of a boom and almost create a panicky situation in the money market it is almost impossible to successfully arrest the course of deflation for no businessman would borrow at a zero rate of interest.[40]

Stabilisation of business.

Business stabilisation is to be secured through price changes. A rate of growth of bank credit which is roughly equal to the average long-term rate of growth of production and trade is essential. A production index plus other economic data instead of mere price index alone is essential for creating credit by the banking system. "Enough credit and not too much credit is to be the ideal."[41] The realisation of this through credit control can flatten out the business cycle. As there is no better means to control the credit cycle it is universally recommended as very

37 See J. M. Keynes, Treatise on Money, Vol. II, p. 339—341.

38 Quoted by J. S. Lawrence, Stabilisation of Prices.

39 The main objectives of sound monetary policy for example the maintenance of the parity of foreign exchanges without disturbance to domestic business the avoidance of the credit cycle and comparative stabilisation of the price level cannot be attained except by the constant exercise of knowledge, judgment and authority by individuals placed in a position of unchallengeable independence with great resources and every technical device at their disposition. The Balfour Committee points out in the Final Report that there would be no confidence that the controllers of a managed currency would always possess sufficient capacity, integrity and firmness and would enjoy sufficient powers and independence to enable them to carry out their delicate task free from aberrations due either to political or economic influence or to imperfect appreciation of the economic situation.

40 See Hartley Withers, Bankers and Credit.

41 See L. D. Edie, Banks and Prosperity.

desirable. It is often presumed that a liberal central bank policy stimulates business revival. Sometimes this desirable result is not achieved. Depression psychology hinders the path. Excess reserves accumulate in the bank's vaults. Confidence in currency is destroyed thereby. As one writer says " accentuated decline of business confidence, budget disorganisation, gold hoarding and flight to foreign currencies and complete collapse of the monetary system " would be the chief results.

The size of the country.

Likewise Central banking action does not succeed sometimes when it attempts to restrict credit for the competition of foreign money market has to be reckoned as a serious force tending to defeat the wishes of the Central Bank. A small country cannot check the course of a boom so long as its nationals have access to the wider money markets of London or New York or Paris. However in a big country the total volume of domestic credit and currency can be made to respond to Central Bank pressure.

Business forecasting.

As it is pointed out elsewhere in another chapter credit control can operate slowly and irregularly. To be effective credit control tends to depend on accurate business forecasting. The science of business forecasting is not perfected as yet. Hence the controlling of business through credit control is well-nigh difficult or impossible.[42]

Other conditioning factors.

One redeeming feature to the situation is that general stability would conduce towards business stability. Stability—social, political and economic—is needed in the entire world. Stable thoughts, habits and methods conduce towards stability. But these, however desirable they might be, are not to be realised in a dynamic society. Hence complete stabilisation and identity of group movements are impossible.

42 Business stability depends on various factors. Rhythmic movements are generated by non-monetary factors. There can be no static aspect in modern business and economic life. Even academic thinkers admit that the striving for the ideal tends to introduce several changes. An absolutely fixed unchanging level of production is not admired at all. The lack of homogeneity in the economic life of a nation presents a dead-level stabilisation of economic conditions. But if business activity and economic life are not stabilised price changes do occur as a result of changes in business activity.

Without gainsaying the truth of the above remarks it has to be recognised that the banking system can do something in the direction of business stability. Seasonal unemployment in industry can be remedied by regularising production as many of the American manufacturing concerns have done. With more level sales a more steady production can be brought about. Steady production tends to steady and regularise employment. The banking system ought to help the business executives in this direction.

Stabilisation of money incomes.

If money incomes like rent, interest, wages and profits are to be stabilised the flow of purchasing power of money would tend to become stable. This would eliminate the " problem of poverty in the midst of plenty ".

The Importance of Money-incomes.

Emphasis is levied on money incomes because they ought to be stable in the long run. While the price-level is a short period phenomenon money incomes are important. Those who secure steady monetary incomes will be the last set of people who wish to destroy social and industrial stability of society by radical political changes which aim at revolutionary activity tending to upset society.

The inequalities in the field of distribution have to be attended to. Better distribution of money incomes would enable the society to solve the main economic problems. Even in this case it must be recognised that everything depends on the behaviour of the community with reference to spending, saving and investment.

Steady rents and interest rates.

While the problems of interest and rent are adequately solved by controlling the factors of demand and supply those of controlling the wages and profits are difficult.

Stable wage-level.

Taking wages the meaning of the doctrine or conception of stable general money wage-level has to be grasped. The fruits of economic progress are to be enjoyed. The material benefits arising out of inventions are generally to be enjoyed by the wage-earners in the shape of a falling cost of living says the above

doctrine. But it does not meet with such universal approval as the doctrine of slowly rising level of money wages. This result would be welcomed by society and considered socially desirable. It is psychologically more satisfying than a fall in the cost of living. It tends to eliminate friction. A stable wage-level might mean rising wages in some industries accompanied with falling wages in the direction of other industries perhaps due to the great rigidity existing between the different occupations. Rising wages are the accepted order of a progressive economic society. Though it is difficult to carry out this ideal in times of economic depression yet it should not be forsaken altogether.

Steady profits.

The next idea is to stabilise profits. A stable profit margin is the ideal. Profit is the motivating conception in the industrial field. If profits are not to be annexed no industrial expansion will take place even though cheap borrowing is facilitated by the banks. If rising prices or stable prices are not to be realised there would be no profit and no borrowing. The real crux is the cost-price relationship. Prices and costs must bear a proportionate relation to each other at all times.[43] When prices are rising and profits are expanding wages and salaries should be made to expand so that industrial equilibrium is not destroyed. That is excess profits or profit inflation without being corrected by increased wages would be disastrous. Generally speaking a wage increase is far better than profit increase and profits generally outstrip wages in capitalistic society. A profit inflation which stands unchecked by increased wages would lead to a rise in scarcity values. This speculation might collapse in due course. A profit inflation arising out of improved technique, if it is unbalanced by increased wages, must be accompanied by a fall in prices so as to enable all sections of society to reap the benefits of economic progress.

Criticism of stable money incomes conception.

Mere stabilisation of money incomes is of no avail. Better distribution of the same over the industrial field is essential.

43 Overhead costs, wages and income should be covered by the prevailing price-level. If wages, rents, and debt charges are rigid and cannot be adapted to the prevailing price-level there can be no economic progress. An obstinate maintenance of costs irrespective of changes in the price-levels would hinder economic progress.

Goods are usually divided into consumption goods and capital goods. Income stability cannot guarantee the stability of cost-price equilibrium on which depends the problem of maintaining an industrial equilibrium.

The cost-price structure is very rigid in almost all countries. Adequate profit data and data concerning wages and other items in the whole cost-price system have to be compiled.[44] Several ideas like "cost-price structure and relationship, debts and income, debt and capitalised prospective profit, consumers' goods, industrial equipment, incomes received and incomes spent" would have to be carefully watched. Australia is the only country where such institutional arrangements exist to break down rigidities in the cost-price structure through the machinery of wage-boards. Some such machinery has to aid the Reserve Bank of this country.

Economic equilibrium.

Though this ideal has to be secured by all means there is no unanimity of opinion amongst the economists as regards the means and methods to be adopted to secure this ideal. There are some who hold the view that a "constant price-level maintains the sanctity of contract which is the sheet-anchor of credit." But as Mr. Durbin says "a constant price-level is inherently inflationary." Hence he argues for constant incomes. Mr. R. G. Hawtrey pleads for "steady consumer's income as it sets the pace for production." This would however neglect the importance of "capital goods" and their production with reference to demand existing for the same. Mr. Robertson desires a slightly rising price-level to stimulate the pace of industrial activity. Dr. Hayek would keep the effective means of payment (*i.e.*) purchasing power constant. Dr. Haberler would keep the *per capita* income constant. Carl Snyder and Lionel Edie would provide for a continued expansion in the circulating media. However conflicting the above suggestions tend to appear the maintenance of economic equilibrium by avoiding undue fluctuations in the effective circulation of money tends to keep the price-level relatively stable. It is the interest rate which maintains the equilibrium.

44 Legislation should compel the business organisation to supply accurate and relevant information. Nothing has been done in this direction although I recommended this step years and years ago.

Advice to the Reserve Bank.

The Reserve Bank of India should secure stable exchange rates and due provision has been made for the attainment of the same. It has to secure a comparative stabilisation of internal prices. Through credit control it can afford to secure qualitative and quantitative control over credit created by the scheduled banks. As the cost-price structure is so very important in matters of economic discussion an attempt should be made to secure reasonable economic data ranging over the field of cost-price economic structure. The helpful nature of this data in enabling the R. Bank to control the adequate distribution of purchasing power need not be doubted. A slowly rising wage-level and slowly falling cost of living brought about by improvement in the technique of production would have to be considered as a desirable ideal for our society. Rents, wages interest and profits are the important economic categories. The steadying of the rates of interest and approximating them to the *ideal* or *real* rate that ought to exist should be another important duty of the Reserve Bank. As interest rates afford the key to the maintenance of industrial equilibrium the aim of the Reserve Bank should be to steady, equalise and lower the interest rates in the different areas of the country. There is no mathematical formula by means of which the Reserve Bank can secure the realisation of the above suggestions and objectives. But there should be a cooperation of other factors along with the Reserve Bank. Consumers, individual entrepreneurs, the State, the commercial banks, the Press and the Reserve Bank would have to cooperate with each other to secure economic progress and industrial equilibrium.

THE ECONOMICS OF TUBE WELL IRRIGATION IN U.P.[1]

BY

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The phenomenal development of hydro-electric energy in the United Provinces in recent years has led to the rapid construction of a very large number of tube-wells in the western districts of the province. The limits of canal irrigation from the rivers have already been reached in the U.P. and there is no possibility of any further development along that line. Tube-well irrigation has thus been forced upon the province as our second line of defence for the protection and security of our crops and large areas which were formerly irrigated by the open canals only are now being protected by tube wells. The Government has undertaken a big state tube-well scheme by the construction of 1,500 tube-wells spread over the districts of Muzaffarnagar, Meerut, Bulandshahr, Aligarh, Bijnor, Moradabad and Budaun.

The essential condition necessary for a real tube-well development is the provision of cheap power for lifting the water. Formerly, tube wells were constructed which were run by oil engines. But these were later on found to be too difficult to maintain and too costly to work. The oil engines cannot be maintained in an efficient working condition for a long time. The rapidity with which they went out of order, the difficulty of repairs in outlying and distant villages and the heavy incidence of repair charges—all these combined to increase the cost of water substantially. When they went out of order, they involved great delay which in dry seasons might be disastrous to crops. Further, oil-engines could not be worked continuously for more than 12 to 14 hours a day in the sugarcane season. Hence bigger and more costly engines and also bigger wells were needed than is now the case with electric engines. These involved a bigger capital outlay which is generally beyond the means of the ordinary cultivators or the smaller landlords. The Ganges Grid Scheme started in 1929 is now being completed and it has provided the United Provinces with an enormous volume of hydro-electric energy which is now available at a cheap rate at

1 Paper contributed to the Indian Science Congress, Hyderabad, January 1937.

the site of each tube well. The provision of this cheap power has led to a remarkable development of tube wells within a very short period. Indeed, the hydro-electric works may also be said to have started a real industrial development throughout the province.

The electric tube-wells have a number of advantages over other methods of irrigation. We have already referred to one of them above, *viz.*, the advantage of electric engines over oil-engines in lifting water. But there are other advantages. As compared with the open canals, the tube-well water can be lifted at rates much cheaper than the canal rates. Hydro-electric power produced in huge quantities is cheaper, more constant and available in large bulks. The private wells can get the power at one anna per unit up to 1600 hours and beyond that the charge is reduced to half an anna per unit. For 3000 hours of annual work in a private well, the average rate works out at nine pies per unit. Further, the initial capital cost in a tube well is much less as compared with the major irrigation works and therefore the cost is cheaper. It has been calculated that the capital outlay per cusec varies thus:—

Open canal system	...	...	Rs. 25,000
Tube well system	...	...	Rs. 3,300

Thus the latter works out at only one-seventh of the former. It would thus appear to be more suited in a poor country like India. But at the same time, it must be pointed out that though the initial capital cost in a tube well per cusec is cheaper, it will always need extra power to work it—and the power will have to be paid for—while the open canal will deliver the water by mere gravity flow. This makes an important difference between the two systems but even making allowance for the running cost of electrical energy, Sir William Stamps calculated that the capital cost of the tube well per cusec is 30 p.c. cheaper than that of the canal. The tube well system does not suffer so largely from the heavy incidence of capital charges.

These tube wells can be suitably located at points of intensive cultivation where they would be most valuable. They need not be constructed in less culturable tracts where naturally they could not be as valuable as elsewhere. A canal, on the other hand, must pass through a definite area regardless of the fact that large portions of intervening tracts are completely unsuitable for irrigation. If the water has to be drawn from A and has to be carried to B, A and B must be joined by a line

irrespective of the fact that large portion of the intervening areas may be too arid or too unculturable to derive any benefit from the canal which flows through them. It is absolutely a case of lost or wasted opportunities making for a higher incidence of waste rates. On the other hand, the tube wells do not need a line to link them up. They can be put down as dots on a map at points where exactly they would be useful. They thus save needless waste of capital, cost and opportunities. No wonder that there has been a phenomenal development of such wells in recent years-so much so that it is now found necessary to impose strict control by legislation so as to regulate their numbers and limit their rate of abstraction. This has been found necessary in order to conserve the sub-soil water supply which otherwise might be put in jeopardy. The private tube-wells specially of the Zemidars have increased rapidly. About 100 private tube wells are now under construction or nearing completion in the Grid area. When these are completed the total of private wells would come up to about 400 in addition to the state tube-wells already sunk in that area. About 1,500 state tube-wells are now under construction or have been completed in the western districts of the province.

One great advantage of the tube well is that it allows the supply to be volumetric or quantitative. It thus effectively saves the waste or abuse of water, which is one of the great handicaps of canal irrigation. As the Agricultural Commission in India (1928) found, canal irrigation involved an enormous waste of water. Wheat in Northern India is over-irrigated to the extent of 30 to 50 p.c. and the same is generally true of other crops as well. Well irrigation is more economical because every bucket that is raised has to be paid for in time and labour in a way which impresses and appeals. The canal water, on the other hand, is paid for not by the amount actually used but by the acreage cultivated or by the area of the crop matured. The cultivator thus has no incentive to economise the use of water and save needless waste.

To be strictly fair to him, however, some part of the waste is due not to the carelessness of the cultivator but to the uncertainty of his supply. The well water is under his own control but the canal water is not. He never knows definitely when the next turn in canal watering will come. Short supplies, arbitrary stoppage of supplies or supplies at irregular time all these upset the cultivator's calculations and they sometimes land him in disaster. He therefore utilises the water—when he gets his turn—by over-saturating his fields hoping that it will keep his crops going until he gets his next turn.

The uneconomic use of water not only wastes what might have been used for irrigation elsewhere but it also definitely injures the soil itself by water-logging. The Agricultural Commission recommended volumetric supply to prevent the misuse of water. This would involve a system of distribution by modules and it is also open to certain other disadvantages. Volumetric supply might benefit the big cultivator but it would be unsuitable to the small one. Inspite of these disadvantages it cannot be denied that in a volumetric supply the cultivator is naturally interested in reducing wastage. Economy of water will follow if the acreage rates in the canals are changed into volumetric rates as in the tube-wells. The tube-wells save a lot of water by preventing lossess in transit. These economies in water reduce expenditure and therefore the cost of cultivation. The tube-wells further release a large volume of canal water for the relief of the non-tube-well areas. This has been actually carried out under the recent conversion scheme and thus they increase the total area irrigated in the province. One tube-well cusec will irrigate 4 to 5 acres per day against 2 to 2½ acres from a canal cusec.

The conversion scheme is a recent innovation. Under it, large areas which were formerly irrigated by canals are now irrigated by tube-wells. This releases a large volume of water which can be carried to more distant places like Agra and Muttra which were formerly not commanded by canals being so long outside the zone of economic irrigation. The shrinkage in the Jumna and Ganges level made irrigation from rivers difficult in those districts. Further, the canals passing through the tube well area are also fed by pumping from tube wells sunk all along the line thereby increasing the total volume of water available therein. Three schemes—known as A, B, and C—are now under trial in U.P., *viz.*, in the Daurala distributary of the Upper Ganges canal in Meerut, in the Right Akbarpur Distributary of the Ganges Canal and in the main canal in the district of Meerut. These schemes will release 200 cusecs for the benefit of the lower districts. It is hoped to convert large areas in Meerut and Bulandshahr districts from the Ganges canal system to tube well supply and thereby release 1000 cusecs in future for the relief of the more arid districts in the south. Thus the conversion system has added substantially to the total irrigated area in the province but it has its opponents as well. The conversion system has been very strongly condemned on higher ethical and economic grounds.

For, what after all, the conversion scheme really comes to? It really means that the sub-soil water of one area will be utilised

to irrigate another where either the water level is too low for profitable well irrigation and there is no power available to work the tube wells or the river level is too low for profitable canal irrigation. Thus the donor area will be penalised in as much as its own water level all round the area where the tube wells are worked will go down so that the distant donee might benefit. It will raise the cost of lifting water in the donor area. It will increase its cost of cultivation. It will ultimately reduce the volume of water available for its own irrigation. This, it is held, is clearly unfair so long as the donor area gets no compensation for its sacrifices in return.

If the water supply is limited for areas already irrigated further extensions of the canal system, it is said, should not be undertaken because that would constitute a grave risk to the areas already stabilised. Where land and crop values, marketing organizations, rent and revenue, standard of living etc. have all steadily increased or improved on the expected and promised security of water supply, no equity can justify the jeopardising of stable economic values in any area in order to extend the benefits of irrigation to new areas. The Government must be just before it is generous.

The same objection to diversion does not arise in the case of canal water drawn from the upper reaches because the area from where it is drawn does not need it or does not need as much and thus there is no question of depriving it of its legitimate dues in order to benefit others. In canal irrigation what would have run to waste is harnessed and distributed for better and more economic uses. But in tube well irrigation—specially under the conversion scheme—an area is robbed of its sub-soil water to pay for another. In these days of reservations and safeguards all round the country, the Irrigation Department—in its zeal for greater irrigation and more revenue—extends its canals without making ample reservations and safeguards for areas already opened up by canals long ago.

The other advantages of tube well irrigation may be briefly noted. In case of timely rain, when water is not needed the cultivator can omit one or more tube-well waterings and thus reduce his working expenses. Tube-wells counteract the danger of water-logging in soils which is a great danger in canal irrigation as we have referred to already. Further, the tube-wells provide a source of pure drinking water in the villages which is free from all pollution or contamination. This is a very great advantage from the view point of rural public health. The tube wells have become so many focal points for real rural uplift.

They have not merely improved the crops and increased their yields but they have also provided bathing and drinking facilities to men and cattle and endowed the villages with loud speakers where the illiterate villager can sit under the cool shades of a tree and hear the daily news of the world at large on the one hand and informations about prices and rates on the other.

Lastly, the tube well scheme has financially justified itself. The capital invested for the 1,500 tube wells is roughly 115 lacs. The gross revenue is expected to be 38 lakhs. Rs. 2·8 lakhs is allowed for depreciation—estimated on a 17 years' life of tube-well equipments and the pumps. After meeting all expenses and depreciation charges the net surplus is expected to be Rs. 5 lakhs by 1941-2—thus yielding roughly 4·3 p.c. to the state and the tax-payer.

Thus, on the whole, the tube well scheme has justified itself.

AN INDEX OF BUSINESS ACTIVITY

BY

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It has now become usual in countries which do not suffer from lack of statistical material to construct annual, monthly or weekly indices purporting to show "just how active or inactive the community is at any moment." This is done by a process of integration which combines in one series the various statistical indices indicating the progress of the community in production, transportation, trade, finance, etc. from year to year, month to month or week to week. Economic activity as measured by such an index is to be distinguished from industrial production as measured by the more common type of index of production published monthly in the Federal Reserve Bulletin for the U. S. A. Such an index is also available for France, the U. K., Japan and other important countries. The distinction between the two indices is thus expressed by Mr. Crowther in explaining the Economist's Index of Business Activity in the Journal of the Royal Statistical Society, 1934:—"Productive industry is still the foundation of all economic wealth, but the superstructure of distribution and service is yearly growing in size and importance; further it is a well-known economic phenomenon that the swings of activity in productive industry are considerably greater than the fluctuations of the economic life of the community as a whole. An index of business activity must therefore cast its net far wider than industrial production." Such an index of business activity has indeed close affinity with the growth of national income; in fact it may roughly be regarded as a measure of the variations of national income in non-monetary terms. Mr. Findlay Shirras has actually used his annual index of business activity in computing the growth of national income of British India in his "Poverty and Kindred Economic Problems in India". In constructing an index of business activity it is desirable and convenient to reckon in physical units, unless one is prepared to face the difficulties arising from the necessity of making frequent corrections for price changes. Though an index of business activity must differ from an index of industrial production in the choice of different series which it integrates,

the statistical methods followed in the compilation of the two kinds of indices are very much the same. The yearly index is easier to prepare because of the greater abundance of statistical data published on an annual basis (such as the figures of agricultural production) and the ability to dispense with corrections for seasonal fluctuations, which one is forced to adopt in compiling monthly and weekly indices. In the United Kingdom the 'Economist' has been publishing a monthly index since October 1933 (and has carried the computation back to 1924), while in the United States of America the New York Times, the Annalist and Babson's Report have been doing the same (the first on a weekly basis) for a still longer period.

An attempt is made here to construct a monthly index of business activity for India on lines closely following the Economist's index. Before discussing the methods adopted in constructing the index, the exact significance and limitations of such an index must be pointed out. In a country so predominantly agricultural as India, it is exceedingly difficult in a monthly index to give proper importance to the agricultural activities, which are so markedly seasonal in character; and even in the Economist's monthly index agricultural activity is entirely neglected. Even in the case of a plantation industry like tea in India, productive activity is practically at a standstill from January to March, and production figures for these months are not published at all. In our index, notice of agricultural activity has only been taken remotely and indirectly in the total number of wagons loaded in class I railways and in the tonnage of vessels entering and clearing in foreign trade. It may next be noted that Mr. Crowther in the article above referred to, complained of the paucity of statistical materials available in the United Kingdom as compared to what is ready at hand in the United States. If this is true of the United Kingdom how much truer must it be of India! In fact before the publication of the "Monthly Survey of Business Conditions in India" started by the Department of Commercial Intelligence and Statistics in September 1933, the material for the construction of an index of business activity on a monthly basis was not available at all (or in a readily accessible form) to the student of statistics. Though this defect has now been partially remedied, yet it has not been completely overcome. Thus even now such a valuable index of industrial activity as the number of persons employed, month by month, even in the organised industries, is not available. Further some of the series published in the "Monthly Survey of Business Conditions in India" can hardly be

utilised in the construction of a business index. Thus our index takes no account of activity in the building trade, because though the figures of production of cement are published, yet the figures are not comparable owing to lack of uniformity in the number of factories from which the statistics are collected. The total number and value of building plans approved by municipalities are not published at all. The series relating to production of sugar is admitted to be provisional and incomplete. Other series like those relating to paper where the amount imported forms a considerable proportion of what is produced within the country, cannot be used with advantage in the construction of the index, unless account is taken of the entire consumption of the article in the country. A misleading view of the activity in the particular field may be given by including the figures of production alone, if, while the production of the article remains stationary or declines, the imports show a continuous increase, or as in the reverse case (as with that of sugar) the production increases (owing to protection), while the imports show a continuous decrease. It is for this reason that the Economist's index is based upon the consumption of commodities like coal, iron and steel, cotton, etc., rather than on their production. Another important limitation of our index arises from the fact that it is based on statistics of production and distribution in the organised large scale industries. In India small and cottage industries are much more important in the aggregate than organised capitalistic production, and a concentration on the statistics relating to the latter alone is likely to give a misleading idea of the activity over the whole field, when large scale industries are gaining ground, as in sugar production or in the transport industry, at the cost of small scale industries or *vice versa*. Again the statistics of production or consumption in a particular industry utilised for the index should be drawn from the entire field rather than from a group of firms only, as a decrease of production shown by the group of firms may be compensated for by an increase in the production of rival firms whose figures have not been included, and there may not have been any change of activity over the whole field of that industry. Similarly a change in the technique of production, such as the substitution of electric energy for steam power, may alter activity in both the fields though in opposite directions; and unless both coal and electricity production are utilised in the making of the index of business activity, an incorrect indication of the activity of the community is likely to be given. Industries producing finished consumption goods, particularly those liable to changes of fashion, should be avoided

for similar reasons. Again series dealing with fields of activity subject to constant interference by the State or other authorities, such as postal receipts, consumption of liquor, etc., are not truly representative of the business activity of the community and should, as far as possible, be avoided. Similarly as already noted, series which originate in monetary values such as imports (coastal) of teak wood and timber, though otherwise useful as an index, can hardly be used unless corrections are made for changes in the value of money—always a difficult task. Only one series expressed in money value has been included in our index without correction for changes in the price level and it is the amount of cheque clearances; the justification for its inclusion without correction being that a rise and fall in prices is itself most often an index of business activity and depression. There is again the most cogent objection voiced by Mr. Macrosty against an index of business activity such as is presented here that "while most of the components of the index reflect current or, at least, recent production, the import (of raw materials) items indicate future, and the export (of manufactures) items past, production while bank clearings relate to a mixture of past, present, and future." Lastly it may be noted that the index here presented, like the Economist's index, provides no clue to the causes of the variations which it depicts, nor does it take account of changes in the population of the country, in productivity per head or in the distribution of national income among its various recipients.

We have based our index on ten series as against 14 used by the Economist for the United Kingdom. The following list gives a description of the component series included by us and side by side with them are given for purposes of comparison the corresponding series used by the Economist. The figures in brackets against the Economist's series indicate the weights attached to them in the British index.

Our series.	*Economist's series.*
1. Raising of Coal ..	Consumption of Coal (4).
2. Total of Wagons loaded (class I railways).	Merchandise on Railways (4).
3. Petrol production ..	Commercial Motor Vehicles in use (2).
4. Registered Parcels (ordinary, V.P. & insured) handled by the Postal Department.	Postal Traffic Receipts (3).

Our series.	*Economist's series.*
5. Production of Pig Iron ..	Consumption of Iron and Steel (2).
6. Production of Cotton Piece-goods.	Consumption of Cotton (1).
7. Tonnage of Ships entering and clearing in foreign trade.	Shipping movements (2).
8. Cheque clearances (at all clearing houses).	Metropolitan, town, country and provincial bank clearings (4+1).
9. Jute manufactures (including twist and yarn).	......
10. Production of Sulphuric Acid	......
......	Employment (10).
......	Consumption of Electricity (2).
......	Building Activity (2).
......	Imports of Raw materials (2).
......	Exports of British manufactures (3).

It would have been possible to include one or two more series in our index such as the production of kerosene and wheat flour; but other series utilised in the British index are either not yet available in India or are to be found in an unsatisfactory condition. It may be mentioned, however, that it is the quality of the series included rather than their number that is more important from the present standpoint. Having chosen the component series the next important thing is to make corrections for seasonal variations. Here a difficult problem is presented. The different months of the year are of varying length and not everyday of the month is a working day (as there are Sundays and other public holidays). Hence this cause alone, apart from other causes, would bring about regular variations in the out-urn from month to month. The Economist eliminates this source of variation by reducing the series to a daily average basis. We have not been able to make separate correction for this variation, for in order to be able to do so a knowledge not only of the number of days in each month, but also of the number of Sundays and public holidays falling in that month (and in India the holidays do not fall on the same calendar day each year) during which business remains suspended, is necessary. An extra Sunday or an extra holiday in any month is likely to make a difference of more than 3 per cent in the output of that month. An average

over a number of years may partially eliminate this difficulty but not completely. Apart from the above cause of variation in monthly output, it is definitely known that in certain cases like coal raisings, cheque clearances, foreign trade tonnage, etc., the activity in certain seasons of the year is greater than in other seasons and this is a regular feature of the figures of output in these fields even if the series are reduced to a daily average basis. Where such seasonal variations are definitely established methods may be adopted to eliminate them. But the difficulty is to know which of the series accepted do show such seasonal flunctuations and which do not. Averaging over a large number of years, particularly if the years are normal, may be expected to bring this out. But unfortunately we had, in most cases, not more than 3-5 years figures (figures earlier than 1932-33 are not available in most cases) to depend upon and these years can by no means be regarded as normal. The Economist makes seasonal corrections for all the series included and we have done the same but while the correction index of the Economist is based on ten years figures, ours are based on 7 years figures for cotton piecegoods, five years figures for cheque clearances, coal raisings and registered parcels handled by the postal department, and 3-4 years figures in the case of the rest. The period in our case is too short for a reliable seasonal index to be constructed, but we had no option in the matter. The seasonal correctors have been obtained by averaging the percentage deviations of the monthly figures from a twelve-monthly moving average of which each month is the centre. Having thus arrived at the seasonal indices for each month in a particular case (such as pig iron production), if the sum of these indices over the twelve months of the year do not total up to 1200 the seasonal indices are proportionally changed to make their total equal to 1200. Thus in the case of pig iron the total of the seasonal indices was found to be 1189·7; and hence the seasonal index for each month was multiplied by the constant factor $\frac{1200}{1189.7}$ to make the total of all the twelve months come up to 1200. This method of making corrections for seasonal fluctuations have been followed both by the British and American compilers of business index. But while seasonal fluctuations alone have been eliminated in the Economist's index, the American indices make corrections for normal long term trend as well, on the ground that the main purpose of an index of business activity is to focus attention on the cyclical movements alone to the exclusion of seasonal fluctuations and long run trend. Thus where both corrections are made

(as in the American indices) the complete index of business activity would indicate the changes in business activity from a hypothetical normal which allows for a constant rate of progress. Where this assumption is justified, such a correction for trend has its uses—it makes apparent whether the previous rate of progress is being maintained or not. We had, however, little choice in the matter as the period under study—5 years—is too short a period for the study of trend and further in no sense can the period be considered to be a normal period, marked as it is by an abnormal slump followed by a slow recovery. We have therefore contented ourselves with corrections for seasonal fluctuations only and even that is very imperfect. The seasonal correction also corrects to a great extent monthly fluctuations due to inequalities in the length of different months, but some error due to changes in the number of working days in each month from year to year (due to holidays, etc.) still persists and detracts to some extent from the merit of the index as the true indicator of business activity in any month in a particular year. It may be added here that the practice of the Economist to recalculate the seasonal co-efficient every year to take into account the fluctuations of the previous year appears to be quite sound and should be followed in the case of India. The seasonal co-efficients for the ten component series adopted for our index are given below:—

	Cheque clearance.	Coal raisings.	Cotton piecegoods production.	Pig iron production.	Jute manufactures.	Wagons loaded.	Tonnage in foreign trade.	Registered Parcels.	Sulphuric Acid production.	Petrol production.
April	106	102	96	94	95	104	100	90	104	105
May	100	103	96	90	109	110	102	95	99	107
June	100	96	97	92	98	96	96	91	91	100
July	96	87	100	107	104	85	95	98	89	106
Aug.	98	85	99	106	105	81	100	105	107	105
Sept.	95	98	100	100	96	86	93	102	95	101
October	96	97	100	109	99	93	99	100	105	97
Nov.	92	92	102	104	101	97	104	103	97	89
Dec.	105	107	112	108	99	108	101	109	117	94
Jan.	106	106	102	104	102	116	102	104	112	93
Feb.	99	115	97	89	94	110	97	97	85	95
Mar.	107	112	99	97	98	114	111	106	99	108

It is interesting to combine the seasonal indices for all the ten series and, having corrected for unequal lengths of the different months, to compare the variations in the activity in the different months of the year. The results of such a study are given below:—

April	101	October	98
May	100	November	99
June	97	December	104
July	95	January	103
August	97	February	106
September	98	March	103

Having eliminated the seasonal fluctuations in this way we next recalculated each series in terms of relatives with the average monthly output in the calendar year 1935 as the base (equivalent to 100). The only ground for taking the year 1935 as the base is to facilitate comparison with the Economist's index which has recently been recalculated with 1935 as the base; otherwise this year has little claim to be considered a normal year. Our next step leads us to the important task of integrating the different series into one comprehensive series. The Economist, as also the American compilers, use for this purpose the weighted geometric average. The question of weights to be attached to each component series is a very important one. The usual method is to attach weights in proportion to the net production of the industry in question as shown by a census of production, which sometimes attempts to reduce the importance of those series which show great amplitude of fluctuation by dividing the effective weight attached to each series by the maximum range of the series during a given period. The Economist determines its weights on a balancing of four considerations: (a) the importance of the sphere of activity represented by the series (as calculated from the census of production); (b) its excellence as a measure of general business activity (thus Postal Receipts are given on this ground heavier weight than mere considerations of size would justify, and Motor Vehicle Registrations less weight because it represents an expanding industry and hence untypical); (c) its degree of freedom from sudden and arbitrary movements (as that of London Bank clearings by the War Loan Conversion Scheme); and (d) its statistical accuracy. Even so, the Economist admits that the final allotment of weights is necessarily arbitrary

and Dr. Rhodes, in his article on "The construction of an Index of Business Activity" in the Journal of the Royal Statistical Society, 1937, launches a vigorous attack on the Economist's system of weighting. In India the problem of weighting is made almost impossible of solution by the absence of any census of production. We have not therefore faced the problem and simply taken an unweighted geometric average of the component series in arriving at our index of general business activity. It must be admitted that it is not entirely satisfactory to attach to sulphuric acid production the same importance as to production of cotton piecegoods or coal raisings. But we derive some consolation from the remark of the compiler of the Economist index that "the curve of an unweighted arithmetical average is not very different in general appearance from that finally evolved." The table below sets out the component series of the index of general business activity (after correction for seasonal fluctuations).

I

1932-33

	Coal production.	Ry. wagons loaded.	Petrol production.	Registered parcels carried by P. O.	Pig iron production.	Cotton piecegoods production.	Tonnage in foreign trade.	Cheque clearance.	Jute manufactures.	Sulphuric acid production.
April	92	81	73	109	64	91	85	94	92	94
May	84	86	77	102	71	85	87	75	83	90
June	89	86	75	104	59	88	82	72	97	86
July	88	90	70	102	52	89	79	107	81	115
Aug.	84	92	75	105	51	97	81	83	88	97
Sept.	89	93	73	103	55	94	88	87	95	90
Oct.	85	88	78	102	54	91	78	97	84	79
Nov.	92	90	81	105	59	92	87	83	92	77
Dec.	86	90	77	102	62	89	92	82	95	78
Jan.	81	89	78	105	72	87	85	87	93	92
Feb.	83	89	78	103	63	82	86	96	93	86
March	89	91	75	108	68	85	88	84	99	75

II

1933-34

	Coal production.	Ry. wagons loaded.	Petrol production.	Registered parcels carried by P. O.	Pig iron production.	Cotton piecegoods production.	Tonnage in foreign trade.	Cheque clearance.	Jute manufactures.	Sulphuric acid production.
April	87	89	72	95	70	76	79	102	87	84
May	88	102	76	101	68	83	87	90	94	97
June	87	95	75	102	66	83	92	94	96	82
July	83	96	83	101	76	83	90	76	87	90
Aug.	98	95	84	99	76	84	93	75	96	88
Sept.	84	95	83	100	77	82	94	90	86	85
Oct.	85	94	81	99	79	83	91	74	95	79
Nov.	88	99	70	106	76	83	86	80	93	81
Dec.	87	98	88	97	79	84	94	96	88	81
Jan.	84	92	83	101	78	81	89	79	91	90
Feb.	87	97	89	100	85	86	92	91	92	97
March	98	100	87	97	86	89	94	108	90	88

III

1934-35

	Coal production.	Ry. wagons loaded.	Petrol production.	Registered parcels carried by P. O.	Pig iron production.	Cotton piecegoods production.	Tonnage in foreign trade.	Cheque clearance.	Jute manufactures.	Sulphuric acid production.
April	96	104	93	99	83	86	93	79	90	84
May	101	100	77	103	97	82	93	90	95	91
June	98	99	87	97	101	86	98	95	92	109
July	98	101	82	99	87	94	94	83	94	93
Aug.	103	104	85	102	89	99	94	84	96	80
Sept.	101	100	93	100	95	95	91	108	94	95
Oct.	106	101	94	105	99	106	102	82	97	105
Nov.	98	96	103	98	98	101	94	92	96	116
Dec.	97	104	88	101	95	103	94	112	97	100
Jan.	100	104	90	99	87	99	101	91	101	90
Feb.	100	102	95	99	86	99	97	98	99	80
March	102	98	101	100	94	95	106	109	95	112

IV

1935-36

	Coal production.	Ry. wagons loaded.	Petrol production.	Registered parcels carried by P. O.	Pig iron production.	Cotton piecegoods production.	Tonnage in foreign trade.	Cheque clearance.	Jute manufactures.	Sulphuric acid production.
April	102	102	100	104	100	100	105	88	107	116
May	102	97	114	101	94	106	104	94	96	86
June	98	98	106	98	96	98	91	115	96	87
July	103	101	107	103	102	99	100	101	105	96
Aug.	94	100	101	101	104	102	99	123	96	112
Sept.	96	98	94	98	109	97	98	93	103	99
Oct.	99	105	90	94	107	102	100	89	105	111
Nov.	107	104	98	102	109	103	105	115	95	95
Dec.	97	91	101	101	107	101	94	87	103	107
Jan.	102	106	114	98	111	97	96	103	100	83
Feb.	105	108	96	105	119	101	103	93	102	98
March	97	108	102	100	115	100	92	82	102	116

V

1936-37

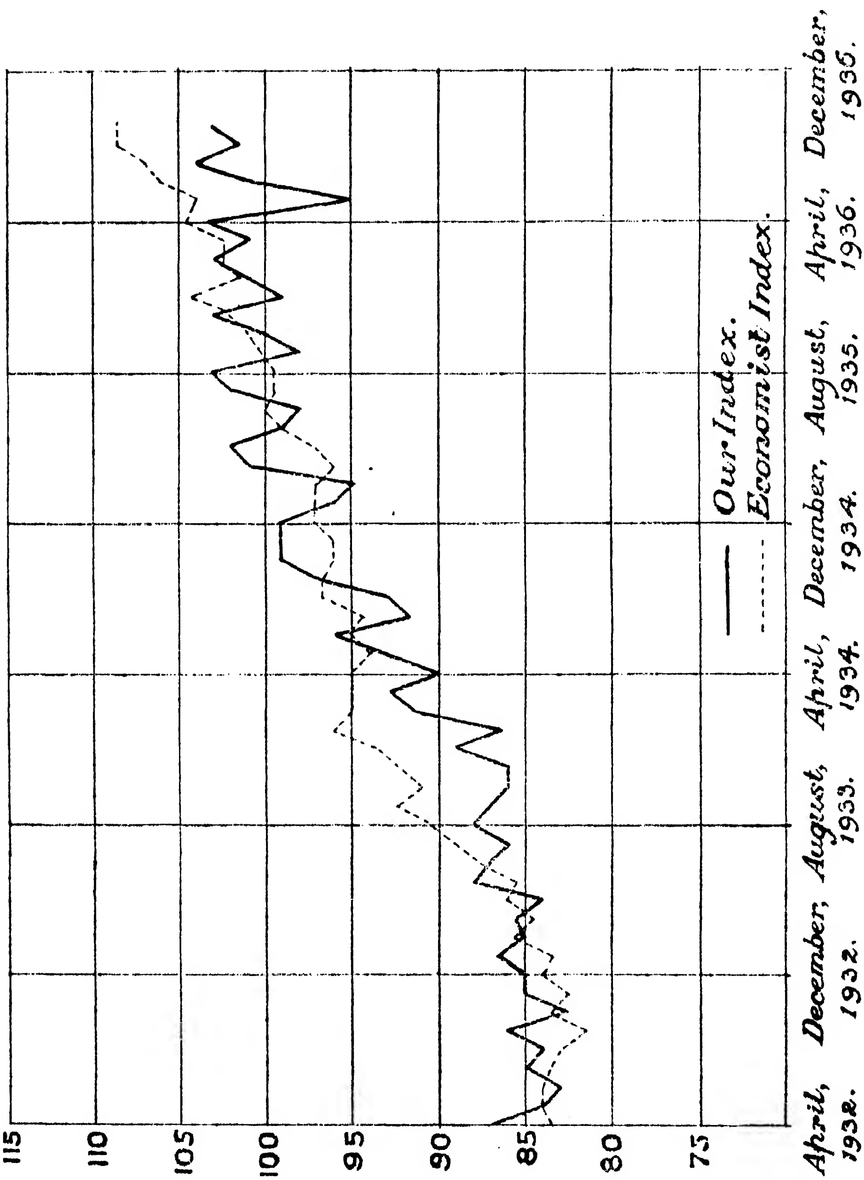
	Coal production.	Ry. wagons loaded.	Petrol production.	Registered parcels carried by P. O.	Pig iron production.	Cotton piecegoods production.	Tonnage in foreign trade.	Cheque clearance.	Jute manufactures.	Sulphuric acid production.
April	104	109	106	102	111	106	100	86	121	93
May	102	97	89	101	118	108	98	120	103	44
June	99	102	110	104	114	106	103	82	122	78
July	98	104	107	114	97	101	103	114	127	81
Aug.	105	107	101	105	104	95	94	85	121	102
Sept.	103	104	101	111	103	96	102	90	139	91

The table given below shows our index of general business activity for the period April 1932 to September 1936 (a period

of $4\frac{1}{2}$ years) and for purposes of comparison the Economists index is also given side by side.

	1932-33		1933-34		1934-35		1935-36		1936-37	
	Our Index.	Economist Index.	Our Index.	Economist Index.	Our Index.	Economist Index.	Our Index.	Economist Index.	Our Index.	Economist Index.
April ..	87	83½	84	86	90	95	102	97	103	104½
May ..	84	84	88	85½	93	94	99	99	95	104
June ..	83	84	87	87½	96	95	98	100	101	106
July ..	85	83½	86	89	92	94½	102	99½	104	107
August ..	84	83	88	90½	93	96½	103	99½	101½	108½
September	86	81½	87	92½	97	96½	98	100	103	108½
October	82½	83½	86	91	99	96	100	101		
November	85	82½	86	92½	99	96	103	102		
December	85	84	89	93½	99	97	99	104½		
January	86½	83½	86½	96	96	97	101	101½		
February	85	85½	91½	95	95	97	103	102½		
March ..	85½	84½	93	95	101	96	101	102½		
Average	84·8	83·6	87·6	91·2	95·9	95·9	100·7	100·7		

A comparison of our complete index with the Economist's index reveals that during a period of $4\frac{1}{2}$ years (April 1932, September 1936) the range of variation revealed by our index is $21\frac{1}{2}$ points (from $82\frac{1}{2}$ in October 1932 to 104 in July 1936), while the range of the Economist's index is 27 points (from $81\frac{1}{2}$ in September 1932 to $108\frac{1}{2}$ in August 1936). The lowest level of business activity was reached in India during the three months May, June, and July (1932) according to our index while it was attained during September, October, and November (1932) in the United Kingdom according to the Economist's index. The average monthly index for each of the four financial years 1932-33, 1933-34, 1934-35, 1935-36 are 84·8, 87·6, 95·9 and 100·7 according to our index and 83·6, 91·2, 95·9 and 100·7 according to the Economist's index. Though it is too much to expect that the monthly indices will exactly tally in the two cases with such marked differences in the conditions between the two countries, yet we find that barring three instances (in January 1934, May 1936, and August 1936) in a period of 54 months the differences between the two indices never exceed 5 points and


115
110
105
100
95
90
85
80
75
April, 1932.
December, 1932.
August, 1933.
April, 1934.
December, 1934.
August, 1935.
April, 1936.
December, 1936.
Our Index.
Economist Index.

very often the difference is much less. Taking everything into consideration one is struck by the remarkable degree of similarity in the movement of the two indices. A graph representing the indices would bring out clearly the changes in business activity from month to month and is therefore appended. The sharp angles are smoothed out and the trend is better indicated by a twelve months' moving average of the complete index and is shown in the graph.

In conclusion it be noted that the index of business activity here presented is only an experimental measure and a crude beginning. It is defective in various ways. The series included may be enlarged by the inclusion of a few more series representing building activity, sugar and paper production; the series may be improved by changing from a production to a consumption basis; by assigning proper weight to each series and by enlarging the period over which averages are worked out in computing the seasonal index. It is hoped that some financial paper in India will take up the matter, and keep up its publication.

We may now turn from a monthly index of business activity to the simpler and more common type of the annual index. Mr. Findlay Shirras constructed and published in his " Indian Finance and Banking " an annual index showing " the growth of business in India," covering the period 1891-1919, with the average of the five years 1890-94 as his base. His index was compounded of 22 series including " external and internal trade, railway traffic, payments of money orders, the capital of joint stock companies, receipts and expenditure of the Government of India, the production of the chief staples—rice, wheat, cotton, tea, coal, iron ore, petroleum, and both jute and cotton manufactures." He did not make corrections for changes in the price level where the series was expressed in money values, as it was probably not required for the purpose he had in view, *viz.*, the effect of an increase of money supply on prices. In integrating the different series for his final index he took the unweighted arithmetic average of the component series. In his " Poverty and Kindred Economic Problems in India " he constructed another annual " index of business activity " consisting of 22 items, but somewhat different from the items he had used in making his earlier index. The item " value of imports and exports of merchandise and treasure" in the old list is replaced by 5 items in the new list, *viz.*, export of jute manufacture, export of food-grains, imports of cotton piecegoods, imports of sugar, and imports of iron and steel. In the new list he includes two new items not included in his old list, *viz.*, bank clearings and employment (*i.e.*, average daily number

of persons employed in factories), but he excluded from the new list items like production of tea and iron ore, without proper justification. He also excluded from the new list items which figured in the old list, like value of coastal trade, tonnage of ships engaged in coastal trade, volume of inland trade, passengers carried by railways, gross earnings of railways, and receipts and disbursements of Government. His new list includes the following items:—rice, wheat, oilseeds, jute (raw), cotton (raw), coal, petroleum, production of yarn and woven goods, exports of jute manufactures, exports of food grains, imports of cotton piece-goods, imports of sugar, imports of iron and steel, tonnage of vessels entering and clearing with cargo, goods carried by railways, value of money orders paid, bank clearings, paid up capital of joint stock companies, and employment. The financial year 1921-22 was taken as the base. The different series were integrated by taking unweighted geometric average. His estimate covered the period 1921-22 to 1932-33. It is not known whether he took value indices or physical volume, and if the former whether he allowed for changes in the level of prices. His index of business activity reveals following movements:—

1921-22 ..	.. 100	1927-28 ..	.. 122
1922-23 ..	.. 106	1928-29 ..	.. 123
1923-24 ..	.. 107	1929-30 ..	.. 129
1924-25 ..	.. 116	1930-31 ..	.. 117
1925-26 ..	.. 115	1931-32 ..	.. 103
1926-27 ..	.. 118	1932-33 ..	.. 102

A NOTE ON THE THEORY OF CONSUMER'S SURPLUS

BY

ALI BIN ABDUL KADIR,

Aligarh.

To introduce a new definition or to alter old systems of nomenclature is a bold step. We shall not try here to do deliberately anything of that kind but we shall only review an old theory to see if it suggests any new definitions and names.

The orthodox definition of Consumer's Surplus as given by Prof. Marshall has invoked a storm of criticism. At the same time men have not been wanting who have taken up cudgels to defend that 'grand old man' of Economics. Nearly half a century ago Prof. Marshall gave the definition of Consumer's Surplus as the difference between the sum which measures total utility and the sum which measures total exchange value. The most clear and lucid exposition of his theory is to be found in Prof. Tuassig's 'Principles.' This idea of Consumer's Surplus has been variously criticised; and to recapitulate briefly, these criticisms are as under:—

Firstly, it was declared impossible to measure Consumer's Surplus on account of the imperfect nature of the economist's balance, *i.e.*, money. We could not say with any degree of surety that the same amount of money spent on different commodities or even on different instalments of the same commodity represented the same amount of utility derived. This was so because the utility or, to be more accurate, the marginal utility of money was itself an indeterminable thing, and varied considerably from man to man. The utility that a poor man derived by spending a penny on his bread could by no stretch of imagination be made to compare with the utility which a rich man sought to obtain by spending a penny on his cigar. Further, even to the same man the marginal utility of money increased with the later units of money spent by him. If a man derived a certain amount of utility by spending a penny when he had £1000 with him, he did not derive the same amount of utility by spending one penny when his stock of wealth had decreased by constant expenditure to £100. It was on this ground urged that the measurement of Consumer's Surplus was impossible as we could not know

with any degree of accuracy the utility derived by a person through spending a certain sum of money.

Secondly, it was pointed out that we could not know what prices a man would go on paying for the earlier doses of a commodity for we did not come across such conditions of supply in our ordinary transactions. In the words of Prof. MacGregor a man was not to be regarded as making an economic offer for life. The stock of a commodity that a man wanted to buy was already fixed in his mind, and suffered variation only according to his elasticity of demand for that commodity, or according to the position that commodity occupied in his "scale of relative values," and also in the "scale of relative values" of other people. No man ever calculated in his mind what prices he would continue to pay for the earlier and earlier units of the supply of a commodity. It was therefore impossible to measure Consumer's Surplus in the manner in which Prof. Marshall indicated it.

Thirdly, this difficulty of measurement was aggravated when we had to take into consideration the existence of a man's "Scale of relative values," ever present yet ever fluctuating; and it is very surprising to note that Mr. Wickstead after a very admirable discussion on "relative values" has still succumbed to the orthodox idea of Consumer's Surplus. To illustrate this point let us take an example. We suppose that a man is habituated to have tea as his morning beverage. Now, he buys half a pound of tea when the price of tea is 2 sh. per lb. The price of tea goes up to 3 sh. per lb. on account of, say, an international scheme of restriction. The person whose case we are considering still buys tea, but he has restricted his consumption to one fourth of a pound every month. When in further pursuance of the same scheme of restriction the price of tea goes up to 4 sh. per lb., the person under our observation gives up tea entirely, and starts taking cocoa. We are thus prevented from knowing what price the man would have paid for the still earlier units of the supply of tea, and thus from measuring Consumer's Surplus in the sense in which Prof. Marshall has defined it.

Fourthly, it was further remarked in this connection that even if some how or other, we knew the price paid or tendered for the earlier units of the supply of a commodity, the utility of that unit would be so great, that the price paid or tendered for it would not represent in any degree the utility derived from it, a fact which led Jevons to keep open at the top the first two rectangles in his space representation of utilities. The thing bought under these circumstances would either be a necessity of

life in which case it would be clearly impossible to set any limits to its utility; or it would serve to gratify the buyer's love of distinction and vanity in which case also its utility to the buyer would more or less be a subjective matter incapable of measurement in terms of money.

Briefly stated, above are the grounds on which the theory of Consumer's Surplus has been criticised, and on the face of them these criticisms seem well-founded. We propose two means of avoiding these criticisms. The first is to change the definition of Consumer's Surplus from that given by Prof. Marshall, and the second is to give to the thing indicated in the new definition a different name.

As for the definition it can be altered to say that the Consumer's Surplus is " the difference between the sum which measures the highest demand value of a stock of a commodity, and the sum which measures its total exchange value." As can evidently be seen such a definition does not take into consideration the total utility enjoyed.. For, the highest demand value does not of necessity represent the total utility which the buyer expects to enjoy out of the purchase, nor can the demand curve coincide with the utility curve. The former is a close curve and the latter an open one, and the Consumer's Surplus as presently defined can be measured only along the demand curve. We can nevertheless say that our present definition yields to us something tangible, and not anything illusory as was the case in the old definition. We are able to obtain this tangible result because the highest demand value of " any stock of a commodity " which a person wishes to purchase, can be measured with a reasonable certainty though regardless of the total utility that may or may not be derived out of that stock. We say " of any stock of a commodity " because the stock of a commodity that a man needs is fixed in his mind and the highest demand value of this stock cannot be arrived at by conjectures, as to what will be the highest prices the man will offer in succession for the 1st, 2nd and 3rd Units constituting that stock. But we can ascertain directly as to what will be the highest price that he will pay for the whole of that stock; and to this we are sure to receive a definite answer. This stock that he needs may vary according as to what is the price of that commodity and as to what is the position the commodity occupies in his " scale of relative values," and in the " scale of relative values " of other people. But the fact remains that the highest demand value of " any stock of a commodity " can be measured with certainty. The result is that " the difference between the highest demand value of a stock of a

commodity and its highest exchange value " is a tangible and not an unknown thing. We can see that this definition can stand better the criticisms that have been levelled against the theory of Consumer's Surplus.

As regards the name, it will, for obvious reasons, be better that we should call this thing what we imply in this new definition, namely, " Purchaser's Surplus " instead of Consumer's Surplus. For, it exists in relation to the demand curve and not the utility curve.

POST-WAR FREIGHT RATES AND INDIAN PRICES

BY

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The level of prices prevailing in a country is the outcome of a number of economic and political influences. Most important of the former set are: the currency and banking policy pursued, and the changes in the economic structure brought about by the industrial development of the country. This fact of the complexity of internal price-level makes it difficult to examine the effects of an isolated factor in its formation. However, such an analysis may be usefully undertaken so long it is borne in mind that the results arrived at are only partly explained by that factor which is thus isolated for examination. Thus Indian economists, specially after the War, have been preoccupied owing to well-known reasons, in explaining the variations in Indian prices exclusively with reference to the currency and exchange policy of the government. In such a preoccupation the effects of changes in freight rates on Indian prices altogether escaped their attention. In the following article we will try to show by an analysis of the available data, that freight variations during the last decade have exercised an important though in no way a spectacular influence on Indian trade and through it ultimately on price-level.

The theoretical relation between freights and prices is clear enough. Considered over long and normal periods freights do not determine prices, but are themselves determined by the conditions of international markets. In the theoretical determination of the movement of trade, freights are already included as an important item in comparative costs. But in relatively short periods transportation costs do affect the day to day commerce by entering therein as a distinct element in price. Every merchant is too painfully aware of this fact to regard any variations in freights as a matter of indifference to him. A fall in freights has the tendency to reduce the price margin between the exporting and the importing country. This is the general effect, whereas individual markets are subject to individual influences. The effect of freight variations is specially strong where transportation charges form a relatively large part of the prices of the commodities dealt in, *i.e.*, in the case of raw-materials

and food-stuffs. This is so because of the relative inelasticity of the supply of such commodities in the exporting country and because of the inelasticity of their demand in the importing country. On the other hand the prices of the commodities imported by a predominantly agricultural country are only slightly affected. Moreover such influences of freights are well-marked where trade is carried on over long distances.

After these brief remarks we are in a position to analyse post-war movements in freights governing Indian foreign trade with a view to find a partial explanation of the recent price changes.

I

The following table shows the development of the general freight index and of the Indian outward freight index during 1920-1936. Both of these indices are as constructed by the "Statist," the former being composed of the 21 main routes of the world. The Indian index, which as its name implies relates to the country's export trade, is based on the following 3 routes; (1) Karachi—U.K./Continent; (2) Rice ports—U.K./Continent; (3) Bombay—U.K./Continent. It is to be noted here that for the purpose of studying the influence of freights on Indian trade and prices, the freight index prepared by the "Economist" is useless. This is so because for one thing conference rates prevail on two out of the total of three routes on which that index is based. It does not therefore represent the normal conditions of an open freight market. Secondly, since for the greater part it is an index of "out-ward freights" (considered from Europe), it relates to the carrying trade of those commodities which form India's imports. This fact destroys the utility of the Economist index from our point of view, because the effect of freight variations on the prices of manufactured commodities being relatively insignificant is rather difficult to bring out.

TABLE I.—*The development of the general freight index and of the Indian outward freight index, 1920—36.*

Year.	General Index.	Indian Index.	Year.	General Index.	Indian Index.
1913	.. 23·4	23·3	1928	.. 25·8	25
1920	.. 100	100	1929	.. 24·9	22·7
1921	.. 37·6	31·5	1930	.. 19·1	17·4
1922	.. 29·7	24·8	1931	.. 19·9	21·7
1923	.. 28·4	27·9	1932	.. 18·8	21·2
1924	.. 29·6	28·1	1933	.. 18·1	21·7
1925	.. 25·3	24	1934	.. 18·8	23·2
1926	.. 28	23·4	1935	.. 18·9	20·4
1927	.. 27·8	25·7	1936	.. ..	..

The following points emerge from the table:—

(1) With minor exceptions the post-war period has been one of continuously declining freights. The difficulties of the shipping trade which developed into a crisis after 1928 date actually from the beginning of the twenties. The fact has now been well established that the fundamental cause, namely, the redundancy in total effective tonnage (quality as well quantity) as compared to the needs of world trade had begun to operate soon after the War. Hence the gradual, continuous and universal decline in freights as the result of this discrepancy.

(2) This decline in the freight rates is paralleled by the same movement in the Indian freight index only upto 1930, or to express it more accurately the Indian index remained at an equally low level. After that however a remarkable development takes place. The Indian index in contrast to a decline in the general index registers a continuous upward trend, the sudden rise in the first year being 4·3. The following table brings out this point more clearly. By taking the general index for each year as 100 the Indian index for the respective year has been expressed as percentage of the former. In other words the table sets out the comparative annual movements in the Indian index in its relation to the general index.

TABLE II.—*The yearly Indian freight index represented as ratio of the general index, 1921—36.*

1913 ..	.. 99·8	1928 ..	.. 100
1921 ..	.. 83·6	1929 ..	.. 91·7
1922 ..	.. 89·7	1930 ..	.. 89·5
1923 ..	.. 96·4	1931 ..	.. 110·5
1924 ..	.. 96·5	1932 ..	.. 116·6
1925 ..	.. 96	1933 ..	.. 116·6
1926 ..	.. 82·1	1934 ..	.. 121
1927 ..	.. 92·6	1935 ..	.. 108

It is evident that the actual rise in the Indian index began in 1930 and has continued right till 1934. A similar calculation shows that, excepting the rice ports where this rise does not occur until the following year, the upward trend in the individual Indian indices commenced in 1929; the greatest rise is to be noted in the case of Karachi—U.K./Continent and the rice ports —U.K./Continent. An intensive research work with an appropriate base selected for the individual exporting centres may be

expected to show an inverse correlation between the prices of staple Indian exports and the respective freight indices of the routes through which they are handled. Unfortunately no index of freights from Calcutta is available.

Now it seems rather curious if not actually contradictory that during a period of generally declining freights, freight rates governing Indian export trade should show an upward trend. Special colour is lent to the phenomenon by the fact that the period covered by the depression has also been one of acute crisis in the shipping industry. It is well known that in the initial stages of trade slump nervousness is registered earlier in the freight than in the general commodity markets. Moreover, a further consequence is a heavier decline in freights than in the level of prices. This is explained by the nature of the shipping trade which involves a very large proportion of fixed capital with the consequent predominance of over-head costs. A comparatively greater fall in freights than in prices during periods of slackening trade extends the range over which the same commodities become marketable, thus bringing into operation a force that under normal conditions tends to check a further fall in prices. That is to say during such period shipping acts as a corrective stimulating adjustment in the capitalistic system.

As the foregoing analysis shows shipping companies serving Indian export trade have not failed to provide the normal adjusting force in checking a further decline in trade. The charge against them goes deeper. The consequence of an increase in shipping charges on Indian export trade has been actually to intensify the situation. A glance at table II shows that this rise has been both abnormal as well as unprecedented, with the result of causing a deterioration in India's position as seller in the world market. This deterioration in the terms of trade had the inevitable consequence of intensifying trade depression in India, which had been caused by world causes like over production and hindrances to the exchanges of commodities. Now it is a well-known fact that this period in India was marked by a greater dispersion between export and import prices than was the case in other agricultural countries.[1] It is significant to refer to contemporary impressions on the phenomenon. Prof. Chablani[2] imputed this abnormal dispersion in Indian prices to "certain

[1] *Vide* "Indian prices during the depression," S. N. Sen and H. C. Sinha, Statistical Laboratory, Calcutta.

[2] *Vide* his "Trade depression in India." in the Indian Journal of Economics, Allahabad 1933.

unknown" causes. The above data and their analysis provide an abundant proof for the statement that the rise in outward freights has been one of the chief factors hitherto unknown which have been responsible for causing a relatively greater dispersion in Indian prices. Perhaps in the later stages of the slump high tariff impositions themselves encouraged by it have been an equally important cause.

II

It is natural to enquire at this stage whether the same phenomenon is found to exist during the same period in the case of the other agricultural countries like Canada and Australia. The developments in the post-war outward freight indices of these two countries are shown in the following table. Following the method used in table II their annual post-war indices as prepared by the Statist have been expressed as ratios of the general freight index for the respective years.

TABLE III.—*The yearly Canadian and Australian freight index expressed as ratio of the general index. 1913—36.*

	Australia.	Canada.		Australia.	Canada.
1913 ..	101	104·3	1928 ..	..	..
1921 ..	116·2	137	1929 ..	84	80
1922 ..	..	..	1930 ..	100·5	78·9
1923 ..	..	..	1931 ..	105	85
1924 ..	96·5	113·7	1932 ..	100	89·4
1925 ..	..	..	1933 ..	98·6	77·7
1926 ..	..	..	1934 ..	94·7	75
1927 ..	107	107	1935 ..	95·4	84·2

In case the Canadian and the Australian indices had shown any rise, a question for further analysis would have been the relative degree of their post-war rise as compared to that of the Indian index. Actually, however, excepting the year 1927 freight rates on Canadian and Australian exports during the last decade have been much lower than their pre-war level. This is fully in accord with the general trend in world freights. No parallelism having been found to exist, the adverse variations in Indian freights cannot therefore be explained on the ground that the phenomenon has been common to the agricultural countries with large foreign trade in foodstuffs and raw-materials.

The failure of the above analysis to yield any explanation necessitates a further discussion of the question. It sounds rather unintelligible that during the very period when there has been a greater fall in the prices of the primary products than in those of manufactured goods, exports from India should have been subjected to higher transport charges than those applying to other agricultural countries or those prevailing before the depression. On what possible ground can we account for this abnormal feature? Perhaps there have been some special developments in the shipping trade itself which may provide a possible explanation. As was to be expected shipping has fully borne the brunt of tendencies leading towards economic nationalism. During the depression the shrinkage in world commerce led to a catastrophic slump in carrying trade. The nature of certain services also became uneconomic in character. In some of the shipping journals these times have been aptly spoken of as the "one way cargo age". In the shipping industry the round voyage only is the economic unit of operation. Consequently any increase in the ballast traffic or any fall in the load-index raises the cost of carriage which must be borne by the traffic using the service. Such services can neither be economical to the merchant nor to the ship-owner. Now if we discover any such changes in the over-sea traffic then the adverse variations in freights discussed above will be clearly accounted for. But an examination of the number and tonnage of vessels with cargo and in ballast entered at British-Indian Ports during 1926-36 reveals the contrary facts. So far as the Indian trade is concerned there has been an actual decline in ballast traffic since the trade depression.[3] This decrease is mainly accounted for by the dwindling coal exports from England to the East, which had been the greatest single item as ballast cargo. Thus a fall in the number of ships employed in Indian trade, itself a consequence of depression, was accompanied by a decline in the ballast traffic. This leads one to the conclusion that the load-index of vessels must have risen to certain extent. Judged on these criteria the cargo space employed on this route has been better utilised since the beginning of the depression. Or in other words the condition of the industry necessitated some rationalisation being secured in these carrying services. Such a factor in industrial efficiency by introducing economics in operation ought to bring down rather than raise freight rates under normal economic conditions.

3 *Vide* Oversea Trade and Navigation of India, Vol. II.

The various developments in the carrying trade discussed above do not furnish any justification for the recent rise in freights on Indian export trade. Nor does the argument that this rise has been caused until recent times by the high level of Suez Canal dues stand closer scrutiny. For that is a factor which is applicable to all eastern routes. As examined above the Australian rates do not register any rise. Moreover, the alleged high level of the canal dues does not explain why the Indian freights rose after 1929 and not before when the dues were equally high. The inevitable cause of the phenomenon must be sought in the organisational changes in shipping serving India, or more explicitly in the growth of tendencies towards concentration in the Indian export carrying trade. A heavy decrease in the magnitude of operations having brought about considerable losses gave rise to rate agreements, thus increasing monopolistic power in areas where it could be secured without any great difficulty. This achievment in Indian trade where tramp services once used to be the normal feature has also been followed, though not to the same extent in the Canadian and Australian trade by the institution of the " minimum freight rate schemes " since 1935. These facts give cause for apprehension that the revival of Indian export trade, now that recovery is getting a momentum, may be retarded by comparatively high though absolutely considered declining freight rates. So far as the period 1929-34 is concerned the conclusion is clear enough. The effects of an extraordinary, unprecedented, and unparalleld raise in freights on Indian export trade has been doubly baneful to the national economy. For one thing the effect was to curtail export markets. Secondly, foreign competition with Indian industries was intensified under low freight rates on imports. The actual dumping of manufactured goods was actively promoted by dumping services in the import carrying trade. The safeguarding of infant industries thus exposed necessitated a further resort to tariffs with the ultimate effect of enhancing the dispersion between the prices of imports and exports.

THE DEVALUATION OF THE FRANC AND ITS LESSON FOR INDIA*

BY

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SUMMARY

The agreement between England, France and America is most welcome as a harbinger of economic sanity dawning upon humanity. France has been rightly allowed to devalue her currency up to a limited extent as a compensation for its over-valuation which she suffered when first England in 1931 and then America in 1933 went off the gold standard. England and America agreed to this not as a matter of charity or even altruistically but to safeguard their own material interests. Otherwise International Trade which was slowly but steadily recovering from the restrictionism of the past few years would have been thrown back once again in the medley of confusion and uncertainty caused by the abandonment of the gold standard by France, 1936.

The lesson of all this is that we should try to diagnose the disease of society correctly and apply the right remedy rather than treat money as the sovereign panacea for curing all our economic troubles. In the past fifteen years many countries have tried the easy solution of the problem of economic recovery through Inflation or Reflation. But in almost all these cases they have made matters worse and have had to retrace their steps most painfully.

While not subscribing to the view that we should try to keep money absolutely " neutral " in matters of economic recovery, it needs to be greatly emphasised that its use for such a purpose must be confined only to suitable occasions. Such occasions arise when it has been definitely ascertained that the difficulty in the way of economic recovery is that of money. In the present case experience has shown that it is not so. India should gain from this experience.

It is a most difficult task to find out whether on any particular occasion economic recovery can be achieved through money.

* Written for the Indian Economic Conference in Session at Agra, 1936-37.

A highly developed and efficient banking system can greatly help in ascertaining this as it can keep harmony between savings and investments. The banking system of a country can perform such a function only when it is not too much interfered with by those who are not directly in touch with the needs of business of a country, specially the Government.

India has not got such a banking system and her economic life in other respects also is not sufficiently knit together to make possible an easy and a quick solution. But the fact that we are recovering under 1s. 6d. ratio along with all the Sterling Block countries gives grounds for the belief that India has not been made to follow a policy altogether out of harmony with the trend of events in the world and has not suffered for what has been done.[1]

I.

In the last week of September 1936, an arrangement regarding exchange stabilisation was reached between England, France and the U. S. A. All arrangements between countries aimed at reducing the risks of uncertainty in human affairs are to be welcomed. This world of ours has suffered from a long-drawn-out agony of a great depression during the last decade or more. The causes of this depression need not be gone into here. But it is undeniable that Exchange manipulations and tariffs have, to say the least, greatly intensified the depression. Under these circumstances such an agreement is to be welcomed all the more. It may be regarded as a sign of a return of sanity after the painful experiences of the last few years.

Let us first understand what this agreement means. We can then discuss why it has been made and what we should learn from this for our own country.

II.

The rate of exchange between England and France immediately before this agreement was about 75 francs for a pound sterling. Between England and America it was about \$4·86 for a pound. These rates had enjoyed a measure of *de facto* stabilisation. It does not mean that the Governments of these countries had promised one another that they would follow a common monetary policy, so as to maintain these rates rather than disturb them by further inflation or deflation. Yet

1 See the Report issued by Dr. D. B. Meek, the Indian Trade Commissioner.

they had felt that causes for such disturbances had better be avoided. These rates then had no official fiat put upon them, *i.e.*, they were not treated as "par." Still they were more or less stable. The present agreement has simply amounted to an official recognition of the practice which had resulted in this *de facto* stabilisation along with affecting a slight change in the result. The *de facto* stabilisation of exchange rates between these countries had resulted from a monetary policy followed by these countries which was no longer subject to sudden and capricious changes. It was then agreed that this was most advantageous for all of them. But the position had become a little too uncomfortable for France. The other two countries therefore agreed to give relief to her even though it meant a little sacrifice on their part. They said, "Let us recognise the necessity of devaluation for France to a strictly limited extent." The rate between England and France was to be about 100 francs for the pound sterling. The French Government was, therefore, allowed to lower the value of its currency to the extent that whereas 75 francs were sufficient to buy a pound before, 100 would now be necessary. All the three countries said, "Let us recognise these rates as normal and let us strive to achieve these and stabilise them when they are once achieved." This, in simple and non-technical language, is the meaning of the agreement.

III.

Why did France want to lower the value of its currency? Why did England and America agree to such a proposal? Was such a thing in the interest of France? That surely it was. Otherwise France would not have wished it. Was such devaluation of French currency likely to go counter to British and American interests? A prominent economist of Lahore says, "Yes." But then the question arises, in that case why did Britain and France agree to such an arrangement? This is "incomprehensible" to the same prominent economist who "wonders why England had agreed to about 31 per cent. appreciation in the value of the sterling." He tries to explain this by saying, "Perhaps some political factors had played a part and England had agreed to this arrangement in order to conciliate France, for there was a danger of war in Europe."[2] Later another explanation occurred to him and he wrote:

2 See *Tribune*, p. 5, dated 6th October, 1936.

"Britain possibly hopes that the anticipated removal of restrictions on foreign trade will neutralise the effects of sterling appreciation. That remains to be seen."[3] In this latter quotation also the writer seems to be doubtful as to the real reason for Britain agreeing to the devaluation of the franc. He suspects that English people must have built hopes of a revival of trade as a result of this agreement leading to removal of restrictions on foreign trade. But he thinks the fate of Britain is sealed, their foreign trade is doomed, and that they are living in a food's paradise. He thinks so because in the very next sentence he says further: "The talk about the tripartite agreement ushering in a new epoch of peace and prosperity is pure bunkum."[4]

The reason for this agreement, however, is simple. In the absence of any very definite evidence we must not suspect any country of having a crooked aim in this or that agreement. The plain truth is that quite apart from the far-reaching consequences which the agreement may lead to in the future, it is immediately advantageous in itself to all the countries concerned. It is advantageous to France because it enables her to go off the gold standard, raise her price-level and encourage her producers and exporters. Under the gold standard, exports of a country are encouraged when her price-level goes down. If a gold standard country exports gold, it leads to a contraction of her currency and credit and a consequent fall in prices. This induces foreigners to buy more from her as her prices are comparatively lower than what they are in other countries. But a country cannot afford to go on lowering her prices indefinitely. There is the question of costs. Prices cannot be reduced beyond the cost of production. Cost of production also cannot be lowered beyond a certain minimum, *viz.*, the cost of maintenance of the labourers and the necessary reward for capital, etc. Besides, lowering of prices discourages production in general as it produces a feeling of depression among the business community and the industrialists.

There is another alternative to fall back upon with a view to encourage exports. That is called devaluation. You can either reduce prices of your articles to induce the foreigner to buy from you a larger quantity of those goods—which is deflation—or you can reduce the price of your currency in terms of the currencies of other countries. Fluctuations of prices of

[3] See *Tribune*, p. 5, dated 15th October, 1936.

[4] *Op. cit.*

currencies of different countries go on continuously. Rates of foreign exchanges move round "pars," *i.e.*, the official ratios. When a country officially decides to make its currency cheaper for that of any other country, *i.e.*, declares that a unit of its currency will buy a smaller quantity of a foreign currency this is called devaluation. This is what has been done by France. An Englishman now buys goods from France worth 100 francs when he spends one pound whereas formerly he bought goods worth 70 francs for the same pound. An Englishman feels happy because he gets more goods for the same money. A Frenchman feels happy because he gets more francs for his goods. Deflation and devaluation are thus said to be alternatives of each other.

However, this happiness all round does not last long. For, let us see how a country reduces the value of her currency for that of a foreigner. Economists have pointed out for a long time that if you want to reduce the value of a thing, you can either increase its supply or reduce the demand for the same. In this case you do not want to reduce the demand for your currency coming from foreigners. On the other hand you want them to demand it more and more. The only other means at your disposal, then, is to increase the supply of your currency. This leads to a reduction of not only its external but also its internal value. Not only that a foreigner buys a larger quantity of your money than before for a unit of his money but also that the value of your money is lowered within the country itself. A unit of it buys a smaller amount of goods than before, *i.e.*, prices rise.

How much the prices of goods will rise as a result of an increase in the supply of money is never predictable. Sometimes they rise much more than the increase in the quantity of money warrants. Sometimes less. The only hope of a gain from devaluation is that depreciation of money inside the country will not be as much and as quick as its depreciation abroad, *i.e.*, prices of goods inside the country will not rise as much as the fall in the external value of the money of such a country. Thus foreigners will take advantage of the cheapness of the money of a country which follows this course and will buy more goods from her. Observation leads to the conclusion that for some time, at any rate, this does really happen. There is thus a temporary advantage for a country in resorting to devaluation.

But the other side of the picture must not also be lost sight of. A rise in prices leads to greater production. An encouragement to production coming through the channel of inflation does not lead to a reduction of cost. People feel exhilarated by

apparently increasing profits. They do not realise the necessity for reducing costs. They are in this way deliberately put under the delusion that they are making profits whereas in reality their profits are mostly paper profits. The country is exporting goods for paper. Production outruns demand and thus overshoots its mark. This again leads to depression. People have not got the wherewithal to buy all that has been produced and that too at such high prices. Foreigners also begin again to reduce their purchases. This discouraging of exports in its turn accentuates and accelerates a new depression. The whole cycle again repeats itself. That is why it is said that germs of deflation are found in inflation or those of depressions are to be seen in booms which are built up on such sandy foundations. Foreign trade really depends on comparative costs. If we want to encourage our export and to build it on surest of foundations, the only royal road to that is to overhaul our economic machinery in such a way as to reduce the real cost of production of articles which the foreigners buy from us. This, again, must be done only as a result of improvement in organisation and inventions, etc., and not by "sweating" our labourers, *i.e.*, by reducing their real standard of living. The latter is bound to tell upon the efficiency of the people of the present as well as the coming generations. Inflation which is sometimes given the respectable garb of "reflation," however, does not really lead to a reduction of real costs. This lesson was most painfully learnt by humanity as a result of post-war experiments in inflation. It seems to have been lost again.

IV.

It has been said that devaluation gives a temporary advantage and stimulates exports. France wanted to gain this temporary advantage in spite of the consequences which she had herself experienced from such a move in the post-war period. But why? Simply because she could not go on lowering her price level indefinitely as an inescapable result of her sticking to the gold standard. Her exports were dwindling and she had to liquidate her foreign obligations with the export of gold. Under normal circumstances no country minds exporting gold. It leads to a temporary fall of prices as a result of contraction of note issue and credit based on reserves of gold. France had already amassed a huge quantity of gold during the period preceding the present agreement. She was sticking fast to the gold standard and inducing other smaller countries of the gold block, like

Belgium, etc., to do so. She was prepared to part with a considerable amount of her gold if America and, later on, Belgium, would keep her company. But they did not. Adherence to the gold standard had resulted in over-valuation of her currency. This means, her currency was much dearer for foreigners to buy than the comparative lowness of her internal price-level. According to the pre-war practice of the gold standard countries, amassing of gold ought to have led to a rise of her price-level, *i.e.*, her currency could not have been over-valued either internally in terms of goods and services or in terms of foreign currencies. But contrary to that practice she had not increased her currency and credit in spite of her very large imports of gold. In the post-war period the U.S.A. had started the practice of bottling up gold and treating it as a "sterilised dead-weight" rather than as the basis of expansion of note issue and of credit. France had also followed this practice. Later on, an artificial scarcity of gold resulting from a world-wide scramble for that metal led to an appreciation of its value as well as the value of the currencies based on it.

As a result of the restoration of the gold standard in 1925, English currency was also over-valued. It was linked with gold in that year at the pre-war rate, *i.e.*, an ounce of gold was again made equal to £3-17-9. During the war almost all countries had resorted to inflation. England was one of those countries which had taken this drug of inflation in a modest way. The world monetary conference at Geneva had recommended in 1922 that the countries should restore the gold standard. This required deflation. In the case of some countries inflation had gone to such an extent that the restoration of the gold standard at the old rate was impossible. The conference, therefore, had suggested that these countries should adopt a lower ratio between their currencies and gold. But where inflation had not gone to unmanageable limits, there the currencies should be brought back to be linked to the gold standard at the old rate. England had honestly attempted to play her part in this drama although it meant a definite over-valuation of her currency. That after the war countries could not adopt a common aim of their monetary policies is no fault of England. She acted in good faith. That she failed is her misfortune. She played her part so nobly. It should redound to her credit rather than bring any discredit to her. Circumstances for which other countries were responsible forced her to go off the gold standard in 1931. There were some who had advocated that England should return to gold at a lower rate. They said her pound should not have been made equal

to the same amount of gold as it contained before the war, *i.e.*, 123·27 grains (9/10th fine). When she was forced to go off gold in 1931, these people were very jubilant that their school of thought had triumphed. But they did not realise that England had attempted something which was worth it even at such a sacrifice. If once having returned to gold at any parity, countries of the world had stuck to the same and had played the game fairly, there would not have been a scramble for gold and its maldistribution would not have resulted.

V.

In the twenties of this century the world was slowly recovering from the disorganisation caused by the war. It was highly desirable that all possible effort was made to minimise the cause of confusion and disorder. It was within the bounds of practicability for the countries to combine at least as regards the common aim of monetary policy. At least the monetary causes of disturbances in the smooth running of the economic machinery ought to have been controlled, as very easily they could be. But as we have seen, that was not done and England, very much against her will, had to abandon the gold standard. At the same time she was too experienced to follow the down-hill course of inflation too precipitately. Yet other countries, which had important and intimate trade relations with her, rightly got alarmed. If she had abandoned the gold standard what guarantee was there that she would not devalue her currency to a larger extent than was absolutely necessary to wipe off its over-valuation. Their alarm was justified when the former opponents of the restoration of the gold standard—and some of them were very prominent persons—were seen loudly and openly proclaiming that having abandoned the gold standard once again, the aim of the English monetary policy ought to be to raise her price level so as to bring it up to what it was in 1926 or in 1929. In fact the persons responsible for the administration of her monetary policy seemed to have come for the moment under the influence of the school of thought which believes that economic recovery can be brought about by the mystic charms of that universally wooed lady called "Money."

The difficulties of England were realised and appreciated at least by some of the important countries of the world. America is said to have hinted that if Britain would follow a well defined monetary policy she would get relief in the form that the U.S.A would write off a good bit of the debt which England owed her.[5]

5 P. 120. "The Great Depression." By Prof. Robbins Macmillans.

"But in vain. The antagonists of the gold standard, the reflationists, had done their work too well . . . . It did not seem to occur to these gentlemen that obstacles to trade would not be removed until exchanges were stable . . . . and that the perpetuation of the uncertainty with regard to the future of sterling was creating a position in which resort to a competitive depreciation was more and more probable."[6]

The cheapening of the English currency then gave a temporary fillip to the English export. Taking only two countries, England and America, we can say that it tended to increase English exports to the latter country and discourage imports into England from her. Perhaps America would not have minded this for a short time and up to a small extent. In view of the fact that England had set up the Exchange Equalisation Account, America might have easily trusted her tq confine her inflationery policy within reasonable limits. But American industry itself was far from prosperous after the Wall Street crash of 1929. She could not, therefore, look with equanimity at this prospect of a new blow to her export. If the English people could not be induced to stabilise, the only alternative for America was to pay England in her coin. The game of inflation is not one at which only one country can play at a time. America therefore decided to abandon the gold standard in 1933 and follow England in this wake. This upset the calculations of the English money jugglers. They came to their senses and having lost the chance of accepting the American offer which was so advantageous to them, they now began to realise the advantages of stabilisation. Hurriedly a scheme was presented to the World Economic Conference held in England in 1933. It was also advantageous to England, yet the American representatives asked their President to accept it in the general interest of stabilisation which was good for all countries on the whole. But the swing of the pendulum had now gone to the other extreme. President Roosevelt had begun to dream of economic recovery for America through the charms of the same talisman: money.

At long last both countries having realised the foolishness of the unholy race of depreciation brought about a *de facto* stabilisation above referred to. But at the end of 1936 their attempts at stabilisation were once more threatened from another direction. The few gold standard countries that were left now felt the brunt of over-valuation of their currencies. It was

6 *Op. cit.*

France's turn to take that temporary advantage of inflation and depreciation which England in 1931 and America in 1933 had taken. Nobody could complain that France was doing something improper. But England and America did well to impress upon her that the advantage which they had taken was not really great and did not last long. On the other hand by raising false hopes in the minds of producers it involved the danger of doing greater harm. England and America could easily point out their own recent experiences and those of other countries including France herself. France was not altogether unwilling to learn. After all she would have to stabilise sooner or later at some stage. If the disadvantage she had suffered at the abandonment of the gold standard by England and America could be compensated for, why throw the working of international machinery of foreign trade once again in a welter of uncertainty. England and America in their own interest and in the interest of foreign trade of the whole world in general offered an inducement to France not to create confusion in the economic atmosphere once again, where so slowly and steadily order was being restored. A fine example has been set by these three countries in so far as they have shown that wider interest of all countries are not in fact conflicting. If an attempt is made to understand them it will be found that a fundamental harmony of these interests of all countries subsists below the surface of apparent conflict and clash.

France has been given the compensation for the loss she had suffered due to over-valuation of her currency resulting from the abandonment of the gold standard by England and America. She has now joined hands with forces tending towards stabilisation. These forces may get sufficient momentum and the ushering in of a new era of mutual understanding and prosperity may be greatly facilitated; or these forces may get drowned under the surge of mistrust and prejudices. But no sane economist can say that the efforts for bringing about certainty in human affairs in place of uncertainty and chaos are not worth making; or that such efforts are in the interest only of this or that country and not in the interest of all. England and America could not prevent France from depreciating her currency up to any extent and thus creating an unlimited amount of uncertainty and disorder for them in respect of their foreign trade. They have for their own sake purchased certainty at a small price—certainty which is good for them as well as for France and other countries. This is simple enough and it is surprising that an economist of any prominence should scent a rat in it.

VI.

Almost all countries attempted " recovery " through all sorts of devices. One of these was monetary manipulation. Experimentation with the monetary policy has been going on in many important countries, both governed by dictators as well as by democracies. President Roosevelt assumed the rôle of a dictator in many respects including monetary affairs. But democracy in America is too well founded to be hoodwinked by any single person. The President soon realised that he was playing a hopeless game. He retraced and attempted to undo the evil which had resulted from the monetary side of his " New Deal " experiments.

It is a very hopeful sign that such an agreement should originate from the three big democracies of the world. Dictators may be heroes destined to bring glory of conquest to their countries. Their acquisitions may bring prosperity to a nation in the long run as the resources of the territories annexed through valour and prowess are exploited and become available. But immediate business recovery is impossible through dictation even though such a dictation emanates from a Mussolini or a Hitler. Business is essentially democratic. It is a great democratising force. It can flourish and expand most under conditions determined and controlled on democratic lines. That the three big democracies of the world should realise this first, is but natural. Let us hope that this realisation will lead to greater awakening and ultimately to substantial business recovery. It is not meant to convey the idea that the business should be completely free from state interference in all circumstances. Complete *laisser-faire* was never possible. But the rôle of the state in relation to business should be that of a willing helper by means of supplying information, removing barriers and keeping those enterprises under check and control which are positively harmful, such as that of brewing. It should tell people what they can and should do and help them to do it. The state may also claim to tell them what they must not do. But the state should refrain from telling them what they shall do. Recovery through Reflation amounts to the last of these.

VII.

What is the lesson of it all, for India?

When England went off gold in 1931 her currency depreciated as against gold. As Indian currency is linked with that of England, it also depreciated likewise. At the time of abandonment of the gold standard by England the rate of exchange

between India and England was 1s. 6d. gold for the rupee. After that event it was fixed at 1s. 6d. sterling. As inflation proceeded in England, a paper pound could buy smaller and smaller amounts of gold in the world market. As the rate at which the rupee could be exchanged for an English paper pound was fixed and definite, the rupee also could buy correspondingly less and less amounts of gold. That is how the rupee price of gold went up so suddenly.

A popular sentiment has long existed in this country for fixing the exchange rate at 1s. 4d. for the rupee. When England restored the gold standard in 1925 the rate of 1s. 6d. gold was adopted by the Government of India on the recommendation of the Hilton Young Commission. At that time Indians wanted 1s. 4d. gold. In 1931 they wanted 1s. 4d. sterling. It meant that they were not satisfied with the amount of depreciation of the rupee in terms of gold which had resulted from the abandonment of the gold standard by England. They wanted devaluation also. They have believed in the rate of 1s. 4d. being in the interest of India. Whether it be 1s. 4d. gold or 1s. 4d. sterling, that did not matter for them. But it must be 1s. 4d. in any case. 1s. 4d. seems to possess some sort of a religious sanctity. It seems a natural rate. The feeling that it is the natural rate is really based on the fact that this rate was successfully maintained during the period of 1893 to 1914. And yet if we look at it, this rate is seen to be as much a result of pure accidents in history as the rate of 1s. 6d. 1s. 4d. was adopted by the Government of India in 1893 simply as the most convenient rate according to the market prices of gold and silver. Similarly for a time after the war it seemed as though the market prices of gold and silver would make the rate of 2s. for the rupee as the most convenient one. The Government of India, therefore, adopted it on the recommendation of the Bobbington-Smith Committee. As a result of deflation which England and other European countries adopted as their monetary policy after 1921, gold again appreciated and the rupee touched 1s. 6d. It was at this time that England readopted the gold standard and it looked as though the price of gold would stabilise in the world at that stage. The Government of India, therefore, adopted the rate of 1s. 6d. gold and maintained it till 1931 when it was reduced to 1s. 6d. sterling. The Government of India may have committed mistakes in the past. But that is besides the issue. What is important for us at present is to see that the present policy must not be a mistaken one.

Indian sentiment has almost always been inflationery. When after 1920 all the countries of the world were deflating

we wanted 1s. 4d. as against 1s. 6d. When the English currency depreciated against gold and gold currencies in 1931 our rupee also depreciated with it in so far as it became equal to 1s. 6d. sterling instead of 1s. 6d. gold. But we wanted it to depreciate further, *i.e.*, to 1s. 4d. sterling. Now when England and America have realised the folly of devaluation of their currencies and have been able to impress these on France as well, when there is a world-wide sentiment in favour of stabilisation we still want 1s. 4d. But why? It seems that the experience of England and America has nothing to teach us. They realised the folly of attempting to achieve economic recovery through inflation. The result was that most of the new money that was created remained lying idle in the Banks and the Treasuries. Matters grew worse rather than better. When there was no prospect for expansion of sales yielding reasonable profits, how could business people be expected to borrow more from banks and expand their businesses? The great depression was not due to want of money. It was due to political fears, racial jealousies and mistrust. The difficulty in the way of recovery was not that money and, therefore, the expansion of supply of money could not be a remedy for curing the world's troubles.

All this seems to indicate nothing to us. We have fixed our attention on the fact that first England, then America and now France have experimented with inflation. Why should not we do the same? They have not succeeded. Shall we succeed where they have failed? It seems incredibly foolish for any one to pretend that with all the backwardness of our economic life we could perform the miracle of curing our economic troubles with this wrong drug of money. Nay, it is criminal for any one to suggest that with all our poverty we should indulge in a costly experiment like this when failure is almost sure to be the outcome of it all.

Unlike India, England is governed by her own people. They are as anxious to get rid of their economic troubles as we. They also want to reduce unemployment in their own country. This applies to all Englishmen irrespective of parties to which they belong. They have indulged in experimentation with money and found it of no avail in the present case. It is refreshing to see Mr. Neville Chamberlain confessing as follows:—

"The Government had announced new examination of industrial problems in special areas."

Already by various schemes started in these areas Government had undertaken commitments which would total over

£8,000,000. *The difficulty, he said, was not that of finding money, but of spending it so as to effectively and rapidly achieve the Government's purpose. There was no single solution and Government were trying all possible methods by improving and expanding old industries, bringing new industries into areas and transferring labour.*"[7] That is eminently true. Having abandoned the gold standard the difficulty could not be that of finding money. They could expand and contract it at will. In this case they wanted to increase money only when it was really needed for a genuine expansion of business in general and when business showed vitality of its own to expand rather than a tendency to expand only due to the misleading effects of expansion of money.

This applies to India with far greater force. We have the greatest possible need to overhaul our economic life and strengthen its foundations. Our agriculture is primitive and badly needs reorganisation. Our industry is crying for rationalisation. Our Banking is in an infant stage and wants development and co-ordination. Our methods of marketing are antideluvian and want remodelling. Our Transport is most inadequate and needs to be greatly extended. Of course we want money for all this. But money is not all that is necessary for bringing about an economic revolution. We have men of vision—nay even visionaries who will turn our lives upside down and transplant socialism or communism of Russian or some other brand. But neither money nor visionaries would do. We want men of practical sense at the helm of affairs who would realise that money required for all this should not come as if out of thin air but from the savings of portions of individual incomes. We must work harder, earn more and then expand our sphere of economic activities by investing these savings. There is no other royal road to recovery.

We are doing all this. We have recently set up an Agricultural Research Council, an Industrial Research Council, a Reserve Bank, a Marketing Board and so on and so forth. Let us watch the progress of all these newly set up institutions. The great danger is that a Government may be or may become too selfish and unenlightened and may do all these things only to pacify people and not in right earnest. This danger is specially great when the government is a foreign one. But eternal vigilance is the price which democracy has to pay. We have to pay this price in a special sense. But let us pay it with understanding and not be caught by the money mania or any other fad.

7 "Tribune," p. 16, December 1936. (Italics mine.)

SUB-SOIL WATER LEVEL AND CROP SECURITY IN U.P.*

BY

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There has been a remarkable development of Hydro-electric energy in U.P. since 1929. One result of this development is that the U.P. Government has carried out an extensive scheme of tube-well irrigation driven by the Ganges Grid electricity. The whole scheme—when completed—will involve the running of roughly 1500 tube-wells over a total area of 3600 square miles situated in the western districts of Muzaffarnagar, Meerut, Bulandshahr, Aligarh, Bijnor, Moradabad and Budaun. It will command roughly 2 million acres for purposes of irrigation. Each tube well is intended to command about 1000 acres and to raise $1\frac{1}{2}$ cusecs[1] of water for 3000 hours per annum.

The Necessity for Tube-Well Irrigation.

The main rivers of the U.P. have already been fully utilised for the Jumna, Ganges, Ramganga and the Sarda Canal systems. The limits have already been reached and any further extension of irrigation from the major rivers is now impossible. The supply of these rivers in the winter is now too low to protect the entire culturable area. Our rainfall—though adequate—is still uncertain and it offered incomplete security for the protection of valuable crops. Storage reservoirs in the catchment basin of the Himalayas in order to conserve the surplus monsoon rains are not quite practicable due to the instability of the hill-sides and the risk of silting through erosion. Within a decade or so they would silt up and would be unfit for storage.

The eastern rivers flowing through the independent Kingdom of Nepal make the location of headworks difficult. They have to command the whole irrigable area by gravity flow. The capital cost would be too high and such canals would not pay their way with agricultural prices ruling so low. The cost of water relatively to prices would be very high.

* Paper contributed to the Indian Science Congress, Hyderabad, January 1937.

1 A cusec = 22,000 gallons.

Some of our rivers are so deep set and they flow at such a low level that the water flowing therein runs to waste and it cannot be used for irrigation at all. The Tube-well system can pump the water up from these rivers and thereby reinforce the canal supply. Hence, for all these reasons, it has become necessary to exploit the liberal sub-soil water supply which lies at an economic depth throughout the Gangetic valley. Indeed, that explains why, from time immemorial, the Gangetic valley is honeycombed with wells.

The Size and Extent of the Sub-soil Water.

Nature has provided a huge reservoir of sub-soil water below the Gangetic plain. At a depth of 15 to 40 feet—or more —there are massive layers of coarses and saturated with water. The factors which determine the volume of this sub-soil water are as follows:—

(*a*) The subterranean flow from the sub-montane tracts is considerable. There is a slow but steady seepage from the Terai region where the rainfall is very high. In the mountains, the rivers at first lose large volumes of water by percolation into the gravels. But the lost property is recovered later on when the water reappears southwards in the marshy lands of the Terai zone by percolation.

(*b*) The level or incline of the sub-soil flow.

(*c*) Percolation from local rainfall—The percolation will depend on various factors but it cannot be constant. It varies from place to place according to—

(*i*) the amount of the rainfall.

(*ii*) the distribution of the rainfall. If the rainfall is well distributed in point of time, throughout the year, and in point of space, throughout the province, percolation will be greater than if it is concentrated in a particular locality and at a particular time.

(*iii*) the nature of the soil through which the water will percolate. In some places, the light and porous wind-blown sands while permitting percolation also prevent losses by evaporation. A particular bed of gravel sand or clay is never constant over a wide area. The velocity of transmission of water through the sands will depend upon their transmission

coefficients which can be determined only by laboratory tests. Such tests are now being made and the analysis of sand is being recorded in different areas.

(*iv*) the thickness of the alluvium. Mr. Auden of the Geological Survey of India estimated that the alluvium may approach at least 10,000 feet in thickness in the centre of the basin while in the N.-W. parts of the U.P. it would be about 2000 feet or more. The thickness of the alluvium will determine the volume of sub-soil water. Further, he held that faults in an alluvial facies so rich in sands are of little significance. Even if faults exist the fault plane cannot in any area seal off the water-bearing sands by blocking them off by equal thickness of clay. Messrs. Binnie, Deacon and Gourlay similarly held that even if any faulting exists it cannot possibly interfere with the general lateral movement of sub-soil water. There will always be an avenue for water to travel across any fault plane.

(*v*) the level or incline of the surface flow and

(*vi*) the rate of evaporation on the surface which again will depend on temperature, humidity etc.

(*d*) Slow seepage and field percolation from areas irrigated either by canals or by tube-wells. At the same time, there is a definite loss of sub-soil water by seepage into the river and this has to be taken as a negative factor.

Such being the sources of sub-soil water, we next turn to the question if there is any limit to its volume. Is there—it is asked —any danger of exhaustion in supply? The problem is not facing us alone in India. The same problem is facing other countries of the west, *e.g.*, in California there is a tendency to exhaustion of the sub-soil water as a result of tube-well pumping. A large volume of scientific opinion is growing daily which holds that the world is getting drier day by day. The climate of every country is slowly changing into greater aridity. The extensive denudation of forests throughout the world within the last 150 years has led to a progressive increase in the aridity of the soil. India is no exception to the rule. Forests are nature's agents for the conservation of water supply. It is much better for a country to be without gold than without forests. They are the best part of a nation's capital. Yet the world has lived on its

capital due to the commercial exploitation of the forests on a large scale.

Some scientists hold that there is a progressive increase in the heat of the sun which they now regard as a variable star. In its movements through space, the earth is gradually losing the water vapour and the gases in its atmosphere. The molecules are continually flung out at the limits of the earth's atmosphere with such terrific velocity that the earth's gravitation cannot hold them back. Temperatures in all countries are yielding new records. 125° in the shade recorded in the U.S.A. last summer was never before equalled. The great Salt lake in the U.S.A. has shrunk enormously since the past. At one time it was a huge inland sea covering 30,000 square miles. Today it covers only 1740 square miles.

Prof. Stebbing's investigations have shown how the Sahara is still extending its area rapidly. It is said to be moving southwards at a rate of more than half a mile per year for the last 300 years. Today it is threatening Northern Nigeria, Liberia and the French Colonies with disaster. Lake Chad when discovered in 1823 covered 40,000 square miles. Today the water level has receded so much that a town which stood on its shore in 1850 was in 1905 twenty miles distant from it. Livingstone found Lake Nagami in 1849 covering 630 square miles in area. To day there is no trace of water anywhere on its old bed. In Europe, the geologists have found that the Caspian Sea is drying up gradually and there is a steady decline in its water level.

In the Punjab, every year the desert is claiming more and more of some of the fertile districts in the province (*e.g.* Hoshiarpur). 80 years ago the desert was only 75 square miles. 40 years ago it was doubled. Today it covers about 700 square miles. About 1000 villages with about 70,000 acres of fertile land have been overwhelmed. There is a steady decline in the bed level of our rivers. The Ganges, the Jumna, the Indus, the Brahmaputra etc—all the rivers are now pale imitations of what they were in the past. The Jumna has sunk by over 60 feet in the last 500 years. Its water level is now 200 feet below the level of the plains. Condition in the other rivers are parallel to it. The drying up of the rivers has led to desiccation and reduction in the sub-soil water level all round.

There are some who hold that pumping $1\frac{1}{2}$ cusecs per 1000 acres for 3000 hours per annum may lead to a progressive decline in sub-soil water-level. Doubts have been expressed in and outside the Legislative Council as to the stability and

probable continuity of the sub-soil reservoirs. On the other hand, the Irrigation Department, U.P., has always held that there was no danger of exhaustion and that the rate of replenishment was far greater than the rate of abstraction. Taking the State and private tube-wells as well as the existing river and canal pumping in the grid area, about 3160 cusecs will be pumped year by year from the sub-soil. The question is very important because the security of a million acres of valuable crops and that of a large investment of the tax-payers' money in state tube-wells will both ultimately depend on the security of the sub-soil water level. The U.P. Government recently instituted three expert enquiries into this question, firstly by Mr. Auden, Assistant Superintendent of the Geological Surveys, India, and secondly, by Dr. Mackenzie Taylor, the Irrigation Research Officer of the Punjab Government, and lastly by a Committee of 3 consulting Engineers from London, Messrs. Binnie, Deacon and Gourlay. We will refer to their reports later on.

The effects of exhaustion.

It goes without saying that if the water level declines the results would certainly be disastrous. It would increase the cost of lifting the water. It would increase the irrigation rates. It would also affect the water level in the old open wells throughout the province. The volume of water needed for irrigation may not be available. Thereby it would seriously reduce the security of our crops and therefore of human life in the province. Lastly, it would seriously jeopardise the investment of a huge amount of public money in the State Tube-well scheme.

No danger of Exhaustion.

The experts who enquired into the question generally find however that so long as we allow 1½ square miles of surface area for each tube-well, there is no danger of exhaustion. The even spacing out of tube-wells therefore becomes a matter of urgent necessity. The experts found that the danger of exhaustion is very much exaggerated. In the foothills, the rainfall varies from 80″ to 120″ per annum. In the Terai region just below the foothills the rainfall varies from 60″ to 80″. The sub-soil sands derive their water supplies from the submontane tracts where the rainfall is 50 to 100 p.c. greater than in the plains. This greatly feeds the sub-soil water level. Sir William Stampe has pointed out that an underground river 80 feet deep is slowly flowing southwards at a depth of 100 feet from the Terai swamps to the

Bay of Bengal. There is regional inter-connection between the sub-soil sands and they form a continuous reservoir through which water is slowly finding its way to the South. Mr. Auden found that the thickness of the Gangetic alluvium is far greater than the average depth of the tube-wells (240 feet). With a depth of about 2000 feet and ground level of 700 feet for the centre of the tube-well tract about 1300 feet of these alluvial strata are below the sea-level and the sands located there are bound to be water-bearing. Messrs. Binnie, Deacon and Gourlay found that there was a large equalizing reservoir in the alluvium. As Auden pointed out, in the disastrous earthquake of January 1934 in the Gangetic Valley water was ejected from the alluvium for some hours after the shock had subsided. The long duration of the outflow showed that the water must have had fairly deep origin which had been normally sealed off by clay but was suddenly released due to the fracture of the clay by earthquake waves. Some of the water was hot which showed a considerable depth of origin.

Further, it may be pointed out, that the volume of water taken out annually from any given area would be fractional as compared with the annual replenishment through percolation from rainfall. Sir William Stampe calculated that in Moradabad district (1200 square miles) there is an average rainfall of 37″. Assuming that only $\frac{1}{4}$th percolates while $\frac{3}{4}$th is lost by drainage or evaporation the total percolation is equal to 5 times the total pumped out in an average year from the 350 tube-wells in the district. Mr. Auden also made the same calculation assuming the worst possible condition, and his results are stated thus:—

Rainfall records for Meerut since 1900 show three periods of three consecutive years of low rainfall. The total average would come to 20·8″, say 20″. If the minimum rainfall is taken for the whole tube-well area (3600 square miles) and the percolation factor is taken as $\frac{1}{4}$ then 41,800 million cubic feet of water will be added to the subsoil reservoir. The total volume pumped out from 1500 $1\frac{1}{2}$ cusec wells working for 3000 hours per annum will be 24,300 million cubic feet. Even supposing that there is no addition of water by seepage from neighbouring areas and none by seepage from irrigated lands and that the rainfall is at its minimum there is still a margin of 17,500 million cubic feet for safety. Actually, conditions would be better for the tube-well areas cannot be considered as islands isolated from the surrounding country. The sands are inter-connected and are joined to the Terai sands where the rainfall is heavier. Water in these sands constitute a single reservoir

locally but not regionally. Further, there is considerable percolation from the fields irrigated by tube-wells. Probably, from $\frac{1}{4}$ to $\frac{1}{3}$ of the water pumped out returns to the sub-soil again. Thus, assuming the worst possible case, even then there is a margin of safety. Actually the conditions would be much better.

Messrs. Binnie, Deacon and Gourlay also pointed out that the security of sub-soil supply should be calculated not on the basis of the average rainfall but of the minimum rainfall of, say, 3 consecutive years. Dr. Mackenzie Taylor held that in the U.P. 40 per cent of the rainfall may be allowed for percolation against 25 per cent accepted as the usual rate in the Punjab. With a 40 p.c. percolation factor the margin of safety would be considerably increased. The three experts found that assuming rainfall to be the only source of replenishment, an abstraction of $1\frac{1}{2}$ cusecs per well will leave a sufficient margin of safety against any possible decline in water-level.

An examination of the ground water level plotted on charts for 10 years failed to reveal any consistency because the levels crossed and recrossed in a sporadic manner. But from a close study of these charts Mr. Auden found no sign of progressive change in the spring levels. Messrs. Binnie, Deacon and Gourlay concurred in this view. It is however necessary to watch this carefully in future and careful records should be kept for the purpose. The rate of recovery after pumping must also be noted.

Messrs. Binnie, Deacon and Gourlay found that the average depth of water-level when taken over a period of years is sensibly constant and that rainfall is capable of replenishing it sooner or later. Over the greater part of the alluvium, sands predominate over clays which ensures safety of supply. There is thus not much danger of progressive desiccation though in years of drought the level might be low. They held therefore that the tube-well scheme of the Government is still within the margin of safety.

They found at the same time that the data was insufficient for a complete examination of the problem. Careful tests are necessary in representative wells in different parts of the province. Laboratory test and mechanical analysis of the water-bearing sands have to be carried out. Representative rain gauges must be established for all the well-blocks and observations of rest water levels are essential. It is understood that all these suggestions are now being carried out.

It is thus clear that on the data available, there is no immediate risk of a sub-soil vacuum in the United Provinces and there is no present danger to the stability of our cultivation. If

the danger ever became real, the daily livelihood of millions of people and their economic resources would be at stake. Their standard of living and, with it, the whole economic fabric of society would be in danger of being overwhelmed. Old civilisations and old empires have passed away like shadows through desiccation. It is clear we have no immediate dangers of such a doom but—at the same time—it might be looming ahead. We must be on our guard—from now and for ever. The future of the human civilisation will be determined not by wars but by water—not by howitzers but by hydraulics.

THE TARIFF POLICY OF INDIA

BY

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Industrially India is a land of missed opportunities. The blame rests heavily on the tariff policy of India which has stood in the way of developing India's industrial potentialities.

The Fiscal Commission Report is usually considered the Magna Charta of India's Tariff Policy. The Commission came to the sorry conclusion that India's industrial development had not been commensurate with the size of the country, its population, and its natural resources. Any other commission appointed to investigate the question would even to day (14 years after the Fiscal Commission) reiterate the same judgment.

In this article it is proposed to examine how far the Tariff Policy of the country has worked in conformity with the recommendations of the Fiscal Commission. The departures from the course laid down by the Commission would be further investigated. We will next consider the Tariff Policy under the New Constitution.

The principal recommendations of the Fiscal Commission were:

1. (*a*) That the Government of India adopt a policy of Protection to be applied with discrimination along the lines indicated in the Report.

(*b*) That discrimination be exercised in the selection of industries for protection and in the degree of protection afforded, so as to make the inevitable burden on the community as light as is consistent with the due development of industries.

(*c*) That the Tariff Board in dealing with claims for protection satisfy itself:—

1. That the industry possesses natural advantages; (abundant supply of raw material, cheap labour and a large home market)
2. That without the help of protection it is not likely to develop at all, or not so rapidly as is desirable; and

3. That it will eventually be able to face world competition without protection;

(*d*) That raw materials and machinery be ordinarily admitted free of duty;

(*e*) That industries essential for National defence, and for the development of which conditions in India are not unfavourable, be adequately protected if necessary.

2. That a *permanent* Tariff Board be created whose duties will be, *inter alia,* to investigate the claims of particular industries to protection, to watch the operation of the tariff and generally to advise Government and the legislature in carrying out the policy indicated above.

3. That no general system of *Imperial Preference* be introduced.

(*a*) That no preference be granted on any article without the approval of the Legislature;

(*b*) That no preference given in any way diminish the protection required by Indian industries.

(*c*) That preference do not involve on balance any appreciable economic loss to India.

4. That no obstacles be raised to the free inflow of *foreign capital,* but the Government monopolies or concessions be granted only to companies incorporated and registered in India with rupee capital, such companies to have a reasonable proportion of Indian directors, and to afford facilities for training Indian apprentices.

The dissenting members considered the majority report as half-hearted and halting and wanted a more determined and vigorous Tariff Policy to be adopted. They thought that the conditions laid down as governing the grant of protection were too stringent and would not produce adequate results.

According to minority report "*excise duties* should be restricted to such articles as alcohol and tobacco which are regarded as injurious to public health and to public morality and the consumption of which it is desirable to check and to a few luxuries."

As regards the conditions to be imposed on the Foreign Capital the minority report did not distinguish between the foreign companies enjoying the benefit of protections in India and those

getting definite Government concessions or monopolies. In both cases Indians pay the price whether as consumers or tax-payers.

Discriminating Protection in Practice.

The steel industry has been placed on the list of protected industries. It fulfilled the terms of discriminating protection. Besides it was considered a key industry requiring protection on non-economic grounds. The industry benefited by protection given to it from 1924 to 1934. The production was expanded and the cost of production was reduced. The Iron and Steel Duties Act passed in November 1934 introduced new considerations and departed from the principles laid down by the Fiscal Commission. The Tariff Board concluded that, " on all articles sold by the steel company in direct competition with British imports, either no protective duty is required at all, or if any required, the rates are lower than the normal rates of revenue duty."

Now it may be even conceded that Tatas would be able to compete with British steel without any protection. But removing protection from the steel industry would limit the production of steel to one concern alone. There is certainly a dire need for encouraging new steel factories so that the domestic demand for a 'basic' or a key product like steel may be met from within the country.

By the same Act the preference given to the United Kingdom was increased by enhancing the duties on the continental steel. The loss of customs revenue has been made up by the imposition of excise duty of Rs. 4 per ton on all steel ingots manufactured in India. It would certainly be questioned whether an improper use of the excise duty has not been made here.

The cotton industry is also a protected industry. The import duties have varied from time to time. In the budget of 1930-31, the revenue duty on cotton goods was increased from 11 to 15 per cent but an additional protective duty of 5 per cent was imposed on goods of non-British origin. Subsequent legislation increased the difference between the import duty on British and non-British goods. In June 1933 British cotton goods paid a 25 per cent duty and the duty on Japanese goods was 75 per cent. By the Indo-Japanese agreement the duty on Japanese imports was reduced to 50 per cent. In 1936 the duty on cotton goods of British origin was reduced to 20 per cent.

It would be clear from the above two instances that the *preference to British industries has assumed the status of an independent principle of policy.*

The sugar and the match industries owe their present position to the sheltering care of protection enjoyed by them. There is an excise duty on the manufacture of both sugar and matches. The protection of industries in India has given rise to the question of the proper occasion and the purpose which the excise duties should serve.

The Tariff Board recommended protection for the glass industry. But the Government did not agree. They granted a refund of the entire import duty on soda ash of British or colonial origin utilised in glass manufacture and a refund of the excess of over 10 per cent duty of other soda ash. " It has been urged that the Government have not only given any substantial protection to the glass industry, but have by this made it difficult to develop the embryonic Heavy chemical industry in India."

The points worth noting from the above illustrations are:—

(1) The Government may not accept the decisions of such a competent body as the Tariff Board.

(2) the extension of the principle of Imperial Preference to a large number of articles.

(3) the imposition of excise duties on growing industries.

The Fiscal Commission recommended that *industries essential for national defence be adequately protected.* The Indian shipping industry deserves protection on the above score. But it has not received any help from the Government so far.

The constitution of a *permanent* Tariff Board was considered necessary by the Fiscal Commission. It cannot be said that a permanent Tariff Board exists in India. Although the claims of various industries have been investigated by different Tariff Boards, but the Boards have been *ad hoc* committees. At present there is no Tariff Board in existence. The commerce member assured the house in this year's Simla session that the Government did not contemplate abolishing the Tariff Board for good and that the last Tariff Board was disbanded as there was no problem awaiting investigation by it. The existence of a permanent Tariff Board is necessary for having a continuity of Tariff Policy.

Imperial Preference.

It is not incorrect to say that a general system of Imperial preference has been introduced in India by stages. The Ottawa Pact left no room for doubt about the adoption of Imperial Preference by India. This was further confirmed in the Indo-British Pact (1935). Notice of the termination of Ottawa Pact was given by the Indian legislature in this year's winter session as it was thought that the pact involved on a balance an appreciable economic loss to India.

The Indo-British Pact.

The Indo-British Pact entered in January 1935 introduced changes of a fundamental nature in India's Fiscal Policy. According to the pact the Indian Tariff Board must in future "afford full opportunity to any industry concerned in the United Kingdom to state its case and answer the cases presented by other interested parties." The implication of the above clause would be that Indian industries would have to consult British industries every time they wanted protection or as regards the suitability of measures they wished to adopt.

The Fiscal convention of 1921, which gave India the right to choose the right Fiscal policy for her, for the needs of her consumers and manufacturers, has been threatened by this pact.

The Fiscal Policy and the New Constitution.

According to the New Government of India Act bounties and subsidies should be available, without distinction, to all firms and individuals engaged in a particular industry at the time the enactment authorising them is passed. In the case of companies entering the field after that date the Government should be at liberty to impose conditions of eligibility [that the company be registered in India, that a proportion of directors (not exceeding half) are Indians and the company shall give reasonable facilities regarding the training of Indians]. The Governor or the Governor-General may not act on the advice of the Ministry if the subsidies and bounties proposed involved unfair discrimination against British interests.

According to the principle of reciprocity embodied in the New Act "No subject of His Majesty domiciled in the United Kingdom and no company registered in the United Kingdom should be subjected to any desirability or discriminations to which subjects of His Majesty domiciled in India or companies registered in India are not subjected in the United Kingdom."

The above mentioned provisions of the New Act have placed the British people on the level of the nationals of India. All facilities meant to encourage Indian industries must be extended to the British concerns in India or else the measures would be interpreted as of a 'discriminatory nature' and so would be disallowed. A bill for the reservation of the coastal traffic of India to Indian shipping would be treated as discrimination against the British.

The principle of reciprocity is unfair to India. Opportunity for industrial development in United Kingdom for Indians is of no practical value. They want adequate opportunities in their own country against the powerful vested interests.

Conclusion.

Protection for Indian industries has been vitiated by new principles introduced in India's Fiscal policy. India would not be able to follow a vigorous tariff policy which is so necessary for the speedy economic development of the country. The principle of Imperial Preference has now become a cardinal feature of India's Tariff Policy. Those of our industries will not be able to get adequate protection in which the United Kingdom itself is interested. Our tariff policy will be influenced by British industrialists as they will be given opportunity of putting forward their case and answering the Indian case for protection put forward before the Tariff Board. Any privilege or concession granted exclusively to an Indian industry will be interpreted as discrimination against the British under the New Government of India Act. The principle of reciprocity is meaningless for India. The new Act restricts the freedom of Indian Legislature in the matter of development of industries on national lines. The fact that foreign concerns establish themselves in India behind the protection wall of the country, the grant of bounties and subsidies to non-Indian enterprise on equal terms with Indian firms, (conditions of eligibility in foreign capitalists will be imposed on those which establish themselves after 1935) are likely to create a duality in India's industrial structure as is to be found in China due to the existence side by side of Chinese and foreign owned factories.

THE I.L.O. AND AGRICULTURAL WORKERS

BY

P. P. PILLAI.

The Indian Journal of Economics of January 1937 publishes at pages 338-339 a review of the Booklet issued by the International Labour Office on the 19th Session of the International Labour Conference. In the last paragraph of this review, the writer says: " It is really a matter for great disappointment that, in 1935, an august body like the International Labour Conference should have repeated the gross mistake of thinking that labour problems exist only in industrial undertakings. Anyone who has studied human life first-hand must admit that the greatest abuses and injustices prevail in agricultural areas, and while all must admit that the handling of agricultural labour is very hard, the ignoring of the problem can by no means be condoned."

These statements are the result of an imperfect acquaintance with the work of the International Labour Office, which is as much interested in improving the conditions of agricultural labour as of industrial labour.

As a matter of fact, one of the most arduous battles that the International Labour Office has had to fight was for a clear establishment of its right to deal with agricultural labour. The third session of the International Labour Conference, held in Geneva in 1921, had adopted a series of Conventions and Recommendations for the improvement of conditions of agricultural workers. The French Government, however, took the view that the International Labour Organisation was not competent to deal with the conditions of work of persons employed in agriculture. The matter was referred to the Permanent Court of International Justice for its opinion, and the ruling given was that the competence of the International Labour Organisation did extend to the international regulation of the conditions of work of persons employed in agriculture. It is significant that the attempts to limit the competence of the Organisation in 1921 were not unconnected with the resistance, which began to appear in many circles and many countries at that time, to the humanitarian views which had dictated the terms of Part XIII of the Treaty of Versailles, under which the I.L.O. was established. The great post-war economic depression had just then commenced; and a period of depression always entails the spread of reaction against

social progress. Since it was impossible to make a direct attack on the existence of the I.L.O. without provoking serious discontent among the workers, efforts were directed towards excluding from its competence certain classes of workers whose inadequate trade union organisation made their claims the least insistent. This was the tendency, directly opposed to the spirit of 1919, to which the Permanent Court of International Justice replied by interpreting the provisions of the I.L.O.'s constitution, thereby making it plain that the I.L.O. did not allow States to escape easily from their commitments. In rejecting the theory of restrictive interpretation, the Court pointed out that the aims of the International Labour Organisation were stated in such general terms that "language could hardly be more comprehensive."

Agricultural labour has, thus, been included in the programme of the International Labour Organisation from its earliest days, and the Office has been maintaining an Agricultural Service, the plan of whose work includes, *inter alia*, the following questions: right of association and combination of agricultural workers; collective agreements; all branches of social insurance, including unemployment insurance; wages and hours of work; regulation of the work of women and children; housing; prevention of sickness; supervision of conditions of labour; general and technical education; co-operation; credit. The above enumeration is given to show that, from the outset, the I.L.O. had no intention of dealing with agricultural labour as the Cinderella of the industries and that it is not to be laid at the door of the I.L.O. if such labour has not been put on an equal footing with industrial labour. The following list of Draft Conventions and Recommendations dealing with agricultural labour which have been adopted by the International Labour Conference is in itself sufficient to refute the charge that the I.L.O. has committed "the gross mistake of thinking that labour problems exist only in industrial undertakings."

International Labour Conventions re. Agricultural Labour:—

Convention 10 Minimum Age;
Convention 11. Right of Association;
Convention 12. Workmen's Compensation;
Convention 25. Sickness Insurance;
Convention 36. Old-Age Insurance;
Convention 38. Invalidity Insurance;
Convention 40. Survivors' Insurance.

Recommendations re Agricultural Labour:—

Recommendation No. 11. Unemployment;

Recommendation No. 12. Childbirth;

Recommendation No. 13. Night Work of Women:

Recommendation No. 14. Night Work of Children and Young Persons;

Recommendation No. 15. Vocational Education;

Recommendation No. 16. Living-in Conditions;

Recommendation No. 17. Social Insurance;

Recommendation No. 43. Invalidity, Old-Age and Survivors' Insurance.

It may also be of interest to point out that prior to 1920 there has been no systematic and continuous study of agricultural labour problems at all comparable to that carried out during the previous half century in connection with industrial problems. The report published by the I.L.O. in 1921 in connection with the work of that year's session of the Conference may probably still be regarded as the most complete and most useful international handbook on conditions of work in agriculture. Exhaustive documentary information on agricultural labour problems now appears in the " International Labour Review " or in " Industrial and Labour Information " and in other publications of the I.L.O., and in the series of Studies and Reports which the Office brings out from time to time.

In condemning the procedure of the International Labour Conference as " laborious and tending to result in long-winded committees and drafts and amendments," the reviewer says, " one cannot say that labourers in the world are having better conditions of work and pay in 1936 than in 1900, and what is required is local study and public opinion and legislation, and more than all this, loyal administration of laws and rules." To persons who have made a comparative study of labour conditions now and before the war, a sweeping assertion to the effect that the post-war conditions are not on the whole better than those of 1900 would seem rather hard to justify. So far as India is concerned, it is enough to point out that both public opinion and legislation on labour subjects have certainly been more active and vigilant after the war than ever before. Writing in 1928, Mr. C. F. Andrews has observed: " I have said more than once in public that the

amelioration of labour conditions in India by direct legislation has gone forward more quickly in the last ten years since the I.L.O. was established than was possible in the fifty years before the establishment of the I.L.O. Every one of the great landmarks in Indian labour legislation has been put up since the establishment of the I.L.O. While, up to the year 1919, it seemed quite impossible to obtain any more humane conditions with regard to labour in mines, factories and mills, after 1919 every door seemed to be suddenly thrown wide open, and we have been pressing forward from one Act of labour legislation to another, and all these have been on the whole in the right direction." That the tendency referred to by Mr. Andrews has been in active operation even after 1928 when he made these observations, is clear from the records of the Indian Legislature. During the five year period, 1930—1934, the Central Legislature alone (not to speak of the provincial legislatures which have also been active in this direction) has adopted at least 15 labour measures which owe their inspiration either to the I.L.O. or to the Whitley Report. And the Whiteley Commission itself was appointed as a result of the pressure of public opinion on the Government. Perhaps the most important contribution that the I.L.O. has made to the cause of Indian progress has been the creation of a new public conscience as regards labour and labour problems. How a consideration of the I.L.O.'s decisions by the Indian Parliament has given a new impetus to social progress is a theme on which many men with divergent points of view have exhibited surprising unanimity; and it has everywhere been admitted that the I.L.O. has been instrumental in stimulating public interest in labour questions, and in initiating measures which might not otherwise have come up for adoption.

INDIAN ECONOMIC ASSOCIATION

The twenty-first annual conference of the Indian Economic Association will be held at Hyderabad under the auspices of the Osmania University, between the 29th and 31st December, 1937. The following subjects have been selected for discussion at the conference:—

(*a*) Theory of trade cycles.

(*b*) Indigenous banking—History and problems.

(*c*) Unemployment in India.

(*d*) A current topic to be decided by the Executive Committee.

Members of the Economic Association are requested to contribute papers to the conference on any one of those subjects. Papers should be sent to Dr. B. V. Narayanaswamy Naidu, Annamalai University, Annamalainagar P. O., up to the 30th September, 1937, and to Prof. H. Rahman of the Osmania University, Hyderabad, after that date. Those who send papers after the 30th September, 1937, are requested to supply 100 printed copies of the same. The last date for the submission of papers is 15th December, 1937.

It is particularly requested that the papers should not exceed in length ten pages of the Journal. The attention of the members is drawn to the rule that in case a paper exceeds this length, the additional cost of printing the extra pages will be charged to the author, who will be expected to make an advance deposit for the same. Each paper must be accompanie' by a short summary, and should be type-written on one side only. M rs are requested to intimate changes in address as soon as possibl.

B. V. NARAYANASWAMY

REVIEWS OF BOOKS

Deficits and Depressions by D. T. Smith. (Chapman & Hall, London, 1936, pp. 264. 12/6 net.)

The book under review written by an Instructor in Economics of the Graduate School of Business Administration of the Harvard University is of great topical interest. As the title indicates, an attempt has been made here to consider the unbalanced budgets of the U.S.A., during the years 1933 to 1935. By way of introduction the author has dealt with the history of the relation between the Treasury and the Money Market in U.S.A., since the middle of the 19th century (Chs. 1 and 2). This is followed by a chapter on the War Finance of the country and in relation to the banking system. A contrast is drawn between war deficits and depression deficits, at the end of which the following interesting observation is made by the author:—"The secondary results of the unbalanced budgets in war periods seem almost always to work in ways to accentuate the Government influence. In this respect the effects are different from those which may occur at other times. It has been found that, during a depression, either because of the budgetary position itself or because of associated government policies or simply because of the business down-swing, the use of outstanding balances decreases in a way which may, at least for a while, offset or more than offset the stimulating effects of the new "Treasury outlays." (page 83). The body of the book (chapters 4 to 6) is intended to support this statement by a detailed account of the deficit budgets of the U.S.A. between 1933 and 1935 of the various kinds of extraordinary expenditure, the sources of the funds at the disposal of Government and the primary and secondary reactions on the economic system resulting from the outflow of funds. As the author has remarked: "During a depression, the fundamental desire to relieve the situation may be approached in many ways—by an increase in consumers' purchasing power, by a restoration of profit margins, by a strengthening of the credit structure, and by various other methods which, though they may occasion an unbalanced budget may be definitely incompatible with one another" (page 85). In this connection he has examined the various panaceas advocated by eminent economists like J. M. Keynes, R. G. Hawtrey, F. A. Van Hay, C. Snyder and A. D. Gayer and comes to the conclusion that no single remedy is likely to be effective for the ills of the modern economic system. In regard to Mr. Keynes' proposal which has now become very popular, he writes: "Increased government spending is not always and necessarily associated with a net increase in total spending" (page 191), that is to say, though the primary effects may be stimulating the after-effects of the economic system may be disappointing. For, "psychological reactions are at all times the determining factors of these variations in the rate of spending" (page 216).

The author has pointed out that the main sources of the funds have been the large scale loan operations of the N. R. A., carried out through the medium of the banks, which have been brought under an abnormal amount of state control. In fact, such extensive operations would not have been possible otherwise. As regards the expenditure, not only has

the administration attempted to increase consumer's purchasing power directly, but what is of equal importance, it has tried to strengthen the private credit structure as well.

The concluding chapter, entitled "The aftermath of an unbalanced budget," summarises the results of the discussion and reiterates the author's thesis: "We have considered some of the many proposals for increasing government expenditures during a depression, expenditures which go beyond the relatively simple concentration of activity on public works, and involve an increase in the sum total of government outlays. In addition to projects to remove, or to hasten the normal removal of various underlying disequilibria, each plan for which must be analysed by itself, we have divided the proposed spending into two principal groups, those designed to increase consumer's purchasing power and those intended to strengthen the credit structure. In this latter group loans to banks, so long as they are on good assets, imply no real burden on the public; they serve simply as another way of extending eligibility provisions..... To the extent that loans are made on bad assets there is an assumption of loss by the state. The justification, if any, lies in the prevention of general runs on banks. .... The principal difficulty in the whole policy of securing improvements by strengthening the credit structure lies in the fact that mere willingness of lenders is not always sufficient to induce a revival" (pages 220-21). Again, "The mere quantity of bank credit, regardless of the circumstances of its creation and the existing economic and political conditions must not be taken as of overwhelming significance. Spending is of more importance than mere existence of spendable funds. Of even greater importance is the direction of spending; an increase along abnormal lines will bring about the mal-adjustment in industry which must be corrected when spending returns to ordinary channels" (page 249).

Thus, the reader of the book gets the impression that the attempt of the N.R.A., by means of a series of deficit budgets to reflate the currency and increase the purchasing power of the people in pursuance of expert advice has not borne much fruit. At best it seems to have only increased the idle reserves in the banks of the country coupled with the doubtful benefit of their control by the Administration. If signs of recovery were visible even at the end of 1935, they seem to have been the result of causes other than the policy of unbalanced budget and abnormal state expenditure.

The author should be congratulated upon his clear grasp of the various theories of trade cycle and their exposition in the body of the book, as well as upon the elucidation of the knotty problem of Public Finance *vis-a-vis*, High Finance in America during the present depression. We shall look forward to a second edition of the book or to its sequel which will carry the history to the end of the deficits and the depression in the land of the Almighty Dollar.

N. S. Narasimha Aiyangar

SOUTHERN INDIA: ITS POLITICAL AND ECONOMIC PROBLEMS by Gilbert Slater, D.Sc.

This is a book written by a professor of Economics but does not deal primarily with economic questions. It is rather a reproduction, for the most part, of notes, mental and written, that the author registered while he was holding the post of professor of Indian Economics in the Madras University from 1915-21, and Acting Publicity Officer for 1921-22. As the Marquess of Willingdon, who has written a foreword, says, " we may not agree with all the views to which the author gives expression but the book certainly supplies, almost in the form of a diary, a most interesting account of the economic, social and political happenings during the years he lived in Southern India."

Dr. Slater is eminently well fitted to write a book of this type. He has real sympathy with his surroundings, great earnestness of purpose and a very entertaining style. His book will be read with great interest and considerable benefit by all students of Indian social and economic life. Dr. Slater's observations on such subjects as the Indian system of police and judicial administration, the managing agency system, protection to Indian industries and financial safeguards are both penetrating and sound. He is one of those who feel that India is likely to benefit more by the French System of examining magistrates rather than by the continuation of the existing elaborate structure of British judicial procedure. The comparative failure of the present legal system to secure the best ends of justice is to be explained, however, not by the ill developed sense of integrity developed in the Indian, as Dr. Slater contends. but by the relatively unfamiliar nature of the system.

Dr. Slater was in his Indian days highly critical of the Montague policy, being in fact a supporter of the Pentland School. He has, however, enough openness of mind and courage of conviction now to admit that it was only the pressure of the War that could help even Montague to secure justice for India. Dr. Slater is prepared to grant India full rights of self-determination, within or without the British Empire. For a professor of Political Economy he shows surprisingly little respect for the established principles of the British constitution. His plea is that Indians are not likely to make a success of responsible government. They should have Durbar government, which means that their representatives should freely express their desires and comments, and that the state then should declare its definite policy and carry it out. The nearest general description of what Dr. Slater would consider a suitable system for India, would be benevolent despotism of the Viceroy,who, he insists, should be directly answerable to the King, not even to the Prime Minister. Apart from the intrinsic merits of such a system, its compatibility with Indian self-determination and British constitutional procedure is left unexplained.

It does not appear that Dr. Slater was ever at ease in his job of a professor of ' Indian economics.' As he frankly admits he was innocent of any real knowledge of Indian economic problems when he was appointed. Nobody in authority put him wise about the duties of his post, such suggestions as were given being more or less of a social and an administrative character. While he held the post Dr. Slater tried his honest best to be of use to his students for whose progress he evinces the highest concern and generally to the country of his temporary adoption. If with

the best will in the world Dr. Slater felt relieved when his term expired and was content to leave his job to hands 'to whom it more naurally belongs,' the reason is to be found not in any shortcoming of the person concerned but in the most unnatural craze prevalent in official, and some non-official, quarters in India for importing foreign personnel for all kinds of suitable and unsuitable jobs.

With the most honest effort for six years Dr. Slater is still very uncertain about his hold on Indian economic problems, barring the important field of village life. Even here his factual data is very uncertain. He says that as a rule government revenue works out at about one-fifth of the rent, and about 4 to 5 per cent of gross produce. He takes literacy according to Indian census to include, knowledge of English as well as of a vernacular. He describes the Fiscal Commission's report as having been adopted by the casting vote of the Chairman, whereas even without him the majority was clear and in fact the chairman figures with the dissenting minority. These indeed are matters of detail and do not detract either from the greatness and sincerity of Dr. Slater's academic labours or from the very charming and informative excellence of his book. But if the best of the so called foreign experts after a prolonged stay in India can be guilty of such incomplete observation, what must be the average utility of the class of foreign experts so extensively and dearly imported into India.

Every student of Indian economics will find Dr. Slater's book a very charming companion to heavier work.

D. G. KARVE

BANK OF ENGLAND OPERATIONS, 1890—1914, by R. S. Sayers. (P. S. King & Son, Ltd., London), 1936. 6s. net.

The 'Art of Central Banking' has, of late, received great attention and eminent economists have studied the problem from various aspects and Professor Sayers' work fills an important place in it. He has given an unvarnished account of the day-to-day operations of the Bank of England in the period 1890—1914, but as the narration proceeds, how the Bank had evolved a complex technique unfolds itself, thus correcting the ordinary notion that the pre-War system was more or less simple and automatic.

The pre-War mechanism of Central Banking was supposed to confine itself to the regulation of the reserve ratios as a primary duty while secondary attention was paid to other factors. But such devotion to reserve ratios did not stand in the way of developing fine and subtle shades of policy in the Art of Central Banking. If the Old Lady had simply stuck to the Bank Charter Act of 1844 "waiting for gold to go out or come in before it acted" the author observes that "this study would hardly have amounted to a book at all or it would have been concerned to show, not how the system worked, but why it failed." The Bank often showed a tenderness to home trade and preferred other devices to the use of its discount rate in order to avoid disturbing internal credit conditions. The

Bank Rate policy was always tempered by a consideration for the home market.

That 'fearful weapon of the Bank-Rate which had to struggle for its present position of awful eminence' was not unsheathed unceremoniously at every slight breeze of capital movements. The Bank "had learned that, to some limited extent, Market Rate and Bank Rate could be looked upon as independent weapons" and when "once this was realised the Bank could to some extent meet the public demand that it should resort to the method of raising Bank Rate as sparingly as possible." The Bank implemented various devices in making Bank Rate 'effective' and raising the 'Market Rate.' The 'Open Market Policy' of the pre-War period was not so open because, for purposes of accountancy, the borrowing operations of the Bank had to be presented in a different colour. The Bank, at times, gained control over foreign funds by offering sufficient inducements to such High Contracting Parties as Japan. The India Council, etc.

The Bank of England maintained a reputation as a free market for gold, *i.e.*, buying and selling gold at fixed statutory prices. But it did not hesitate to use 'Gold Devices' when circumstances demanded such a course. The free use of such devices by the Continental banks obliged it to adopt them as a matter of routine. "The rapid elaboration of these devices in the later nineties is somewhat difficult to follow because they soon became such an everyday part of the Banks armoury that they were not always the subject of particular remark." "The Bank moved its price for bars over a range of 4d. between the extreme points of the minimum buying price and the maximum selling price. When this range is compared with the 1925-31 range of 1½d. imposed by statute, it will be realised how much freer the Bank was to act upon the gold points before the War than it has been since." It is consideration for the home market that made the Bank prefer 'gold devices' to the Bank Rate method, but the crisis of 1907 demonstrated the efficacy of the latter method, so much so, the Bank came to rely upon it more and more pushing "the gold devices into the lumber-room as the doubtful expedients of a temporising adolescence."

In the chapter on "Continental Support of Bank" Professor Sayers with all his mastery of detail sifted all the available evidence and established that the Old Lady never stooped even to conquer and whatever help was given by the Bank of France was not gratuitous, but it was as much in her own interests. It is only by means of cooperation between the several central banks that any international monetary system can be maintained. Even in the heyday of the international gold standard it was not automatic. "In short," remarks B. Whale, "none of the central banks really observed 'the rules of the game' and yet the system worked." The Bank of France could afford a considerable fluctuation in its gold reserves and as such could release its gold whenever the political atmosphere was favourable. This vantage ground France enjoyed and made use of it in an opportunist manner.

"The success of the international gold standard," observes the author, "remains something of a miracle." But the mystery of it I think, we find in his chapter 'On the Aims of Bank Policy.' The main aim of the Bank was to maintain the convertibility of the Pound and in this it succeeded. The Central Banks concentrated on the external situation—the exchange and 'circumscribing the area of exchange fluctuations dominated their minds.'

If they showed a soft corner for other things like the home market or internal prices, etc., it was only sympathy they displayed and not an active pursuit to establish or restore any internal equilibrium. 'The less disturbing sweeps in relative price levels than those inflicted upon trading nations since 1914' saved the pre-War gold standard from being drowned and as Edward observes the 'gold standard' is a 'fair' weather instrument of navigation only. Moreover the central banks were not called upon to undertake any intangible and undefinable ideal as 'internal equilibrium' or 'economic stabilisation.' Their aim was modest and in that they succeeded.

Professor Sayers observes that the period surveyed was not free from the troubles arising out of tariff policies, war debts, reparations, political insecurity which are distracting the post-War period, though not to the same degree. In the foot-note he adds that it is in this difference in degree that part of the explanation of the contrast between the pre-War and post-War perhaps lies. As he also suggests, it is 'the collapse at many key-points of the financial machinery of the world' that has thrown the monetary mechanism of the world out of gear.

Professor Sayers' book is a fine specimen of research work. Every statement in the book bears evidence of close and critical study, and of diligent search after a correct interpretation of the events that are described in contemporary literature on which he has to depend entirely for want of access to official records. The pages of 'The Statist' and 'The Economist' are thoroughly anatomised by the author and if he has laid himself under an obligation to them, he more than repaid it by creating a live picture of the Old Lady and her conduct under the able guidance of her successive Governors during that quarter of a century—the 'golden age' of international currency, out of the comments and notes published by them, now commending, now criticising but always subjecting the various measures adopted by the Bank and its official Governors to a careful analysis trying to probe the official mind thus bringing to relief the subtleities of varied bank technique and management. Though the pre-War achievement was not one of perfection, it was one of growth and adaptability displaying the "susceptibility of youth in her divided allegiance" between the external objective and the internal needs of home trade.

CH. S. SASTRY

THE EXCHANGE CLEARING SYSTEM, by Dr. Paul Einzig—Macmillan & Co., London, 1935, pp, 220.

Started on November 14, 1931, by the Swiss and the Hungarian Governments this exchange clearing system has rapidly spread to 77 countries during the short span of four years. Resorted to as a temporary stop-gap measure by the financially weak countries, condemned by the orthodox economists as an unwarranted instance of governmental interference in matters of international trade and finance and admired as an efficacious restrictive measure which would tend to eliminate otherwise inevitable vexatious restrictions the exchange clearing system has been slowly adopted by the financially stronger countries.

Alarmed at the widespread resort to this system in place of free exchange markets of old the League of Nations appointed a Committee to study this system and its diverse ramifications—unilateral, bilateral, triangular and multilateral forms. Tacked on to compensation agreements the exchange clearing system has almost defied the unanimous findings of the League of Nations Committee which recommended its early abolition. Dr. Paul Einzig is evidently dissatisfied with the findings of the above Committee. He gives us a systematic analysis of the Exchange Clearing System—its genesis, its various forms, its technicalities and its effects.

Apart from a systematic analysis of this tendency Dr. Einzig recommends its adoption in a more clarified form. Close supervision by the different Governments would enable the international exchange clearing system to work successfully. He hazards the guess that it might become the order of the day in the economic world of the future.

Students of economics can easily realise its meaning, its manner of working and its broader implications if only they care to peruse this stimulating and well-written work by Dr. Paul Einzig. His faith in the efficacy of the system is so great that he ventures to assert that exchange clearing would soon become an integral part of the planned economic system.

Nobody doubts the efficacy of exchange clearing as a temporary measure but when the world returns to stabilised exchanges with a gold link there would be lesser need to resort to this remedy. Even then gold standard and exchange clearing might be used as complementary devices. Combined with an improved form of gold standard a reformed exchange clearing system can easily solve the problem of international transfers. Thus viewed an international exchange clearing system can easily form part of a progressive monetary policy of enlightened countries who do not care to be mere blind devotees of the old effete *laissez faire* doctrines.

B. Ramachandra Rau

The Reserve Bank and Agricultural Credits, by A. Ramiah, M.A., etc., published by the Bureau of Economic Research, 50, Sandaipet Street, Madura, 1935, pp. 55. Price One Rupee.

This is a short brochure explaining the scope of utility of the Reserve Bank to our agricultural industry. Without dealing in detail with the problem of agrarian indebtedness the pamphlet deals with the situation arising out of the creation of the Reserve Bank. How agricultural credit facilities can be extended by this new authority is outlined? Realising that, it is short-term credit facilities alone that can be improved by the Reserve Bank, the author recommends the formation of an All-India Agricultural Credit Corporation. Its task should be the creation of *agricultural currency* working in association with *general currency* created by the Reserve Bank. He adumbrates the details of his scheme in pages 31 to 43 of his monograph. He follows the details of the British model and would welcome the creation of this new institution.

As the different chapters deal with patent facts there can hardly be any difference of opinion. But his main conclusion as regards the starting of an All-India Agricultural Credit Corporation deserves some detailed attention. A close perusal of his scheme enables us to remark that it would be futile as well as mischievous to start a new organisation such as the above one. It is indeed true that the problem of farmers' credit is still lying unsolved in this country. But matters do not reach any clear solution by adopting this new scheme which is not altogether free from flaws. The mixing up of all types of credit in one and the same hands is dangerous. Specialisation is the key to success. His approved "guarantors" can after all create only a very small amount of credit. There is no open discount market to enable the marketing of the agricultural bills created by the A. C. Corporation. It is almost impossible to make the uneducated agriculturists borrow only for productive purposes. The "approved guarantors" might after all charge high fees for their service. Competition with the existing cooperative societies would delimit the utility of both organisations. There is no provision for a sinking fund scheme attached to the idea of the A. C. Corporation. Without such a provision the bonds floated by the A. C. Corporation would hardly find a market. Here are some of the important difficulties attendant on this scheme. It must be remembered that the British Agricultural Mortgage Corporation tends to specialise in the granting of long-term loans. If one were to read the findings of the Twelfth Cooperative Registrars' Conference held recently at Delhi it can be easily understood how the mixing up of short as well as long-term loans has been positively discouraged. As such this A. C. Corporation which hopes to do the same business can hardly meet with success.

Barring the futility of his suggestion it has to be admitted that a clear and lucid case for a separate agricultural credit machinery has been made out by him. What has been accomplished in the U.S.A. in this direction is also freely mentioned.

Evidently the price of the monograph appears to be too high.

B. RAMACHANDRA RAU

1. INDIA BEFORE THE CRISIS; 2. INDIA IN THE CRISIS, by Brij Narain.

The first of these publications is frankly disappointing. From the title and the Preface one would expect it to be a systematic historical account of Indian economy as it stood on the eve of the crisis. Actually it consists of a series of discursive chapters and miscellaneous notes which do not hang together very well. The field covered is very wide. But while some chapters such as those on poulation contain a straightforward, if somewhat bald summary of known facts, in others the space allotted to various topics is very unequally divided and the writing is uneven. In a large number of instances even the limit of pre-crisis years is not borne in mind and the treatment strays over the problem of the crisis itself. Thus a considerable amount of space is taken up by such topics as the recent assessment relief measures in the Punjab, Mahatma Gandhi's Village Industries Association, Pig iron and the Ottawa Agreement, etc.

The second book is much better planned. It consists of three parts. The first part "India in the Crisis" deals in five chapters with the facts of the Indian situation during recent years. The chapter on Agriculture deals almost entirely with the situation in the Punjab and puts to effective use the statistical material supplied by the Punjab Board's financial accounts publications. The latter chapters are concerned chiefly with foreign trade and exchange and one whole chapter discusses the question of gold exports. In this chapter the account of the trend of gold prices in the future is particularly well-written and the whole of this part, though putting forth nothing novel, is really sound economic writing. The same may be said of the second part which deals with the course of the world crisis as a whole and discusses with reference to data supplied by the League's and other recent publications a number of alleged causes of the crisis. The third, the most ambitious part, is the most disappointing. After, for example, a general description of Fascist Planning and Fascism one could expect the author to bring these remedies in some definite relation with our economic life. This nowhere happens and even when the author talks of planning he never really gets to grips with the fundamental problems involved in the planning effort. If one may, without impertinence, offer a general criticism after a perusal of these volumes it is this: that it would be far better for Prof. Brij Narain to confine his treatment in each separate publication to a few special topics instead of each time attempting to cover an extensive area. In these volumes, such really useful bits, as the general discussion of the agricultural situation in the Punjab and the handling of the financial accounts tend to get lost in a mass of more commonplace writing. Hence not only is their effectiveness lost but they tend even to remain unnoticed. And this would distinctly be a pity.

D. R. GADGIL

THE INSTITUTION OF PROPERTY: A study of the Development, Structure, and Arrangement of the System of Property in Modern Anglo-American Law, by C. R. Noyes, New York, Toronto. Longmans, Green & Co., London. Humphrey Milford, 1936, XIV, pp. 645.

This is an elaborate investigation into the development of the notion of Property in the two principal legal systems of the world—the Roman and the Anglo-American with a view to finding out the substance and structure of "Property" as it obtains in the modern and complex civilised world today. Mr. Noyes is a keen student of economics and has produced this work as a result of great labour extending over many years. Regarding Economics as a branch of the science of human natures and of certain of its relation to the rest of nature, he divides the whole field into three parts: (1) that relating to the structure, (2) that relating to the functioning and (3) that which relates to the quasi mechanical parts, and adds that "the special object of this study is structure *only* of that particular social organisation and institution which is called property," p. 16.

In Chapter II and III Mr. Noyes makes a very detailed survey of the development of the Roman system of property. He examines the nature and structure of the Roman family, the power of its head, the *pater-*

familias, how the Roman family was bound by "propinquity and power and not paternity (or maternity)" p. 34, how the idea of dominium is an extension of the potestas over persons, how in fact the idea of property gradually arose out of the supra-familial authority of the head of the house exercised over persons as well as things. To support his thesis he not infrequently has recourse to philological investigations and argument (as on pp 50 and 51) and even makes excursions into early Germanic law and compares the Roman institution of marriage with that in Germany of early times. Then he comes to the conclusion how ultimately the idea of property in land emerges from the projection of the famila on the land and how "Property in land is associated with settlement." p. 99. After tracing the history of the Roman Will and the nature of Universal Succession he considers the nature of obligations in Roman Law and even pronounces an opinion on the origin of stipulation and mutuum (p. 113) at variance with the views of some well-known authorities including Buckland —a discussion not wholly necessary for purposes of this study. Ius, according to him, is the super-familial power; it meant the collection or the individual authority of the group of citizens p. 152 and not law or "right" in the beginning, and Res was a subject of dispute.

In the next chapter the English or the Feudal system is surveyed. Here Mr. Noyes notices how the two social organisations were wholly different p. 221. He calls the Roman "the allodial or collateral system" and the English "the feudal or the lineal system" p. 222, and observes how the Roman political organisation was wholly super-familial while the feudal system was wholly intra-familial p. 224, and how in the latter slowly territory became property. Remarking that Feudalism was primarily a political organisation avoiding thereby the distinction between public and private law, he goes on to examine the system, the process of sub-infeudation, the various kinds of tenures, and shows how this permitted co-existing interests in the same piece of land p. 256—a thing foreign to the notion of Roman lawyers—and how the tenant had no ownership and his relation was "dependent and derivative"—in fact how the whole law of tenures defining the relation of the tenant is "a complex concurrent but qualitatively different seisins culminating in one with which went occupancy" p. 226.

On a comparison of the two fields of development the author has an undisguised partiality for the stratified system of holding property in England and observes with "Therefore it is not on the whole a proud exaggeration to oppose the English to the Roman system and to perceive as the spirit and essence of the former a concurrent and qualitative division of the various elemental relations which may coexist between men with respect to the objects of property. It is the development of this modernised form—a development which has not yet seen the counterpart in legal theory which is the great contribution of English land law to the institution of property." p. 284.

An Impartial reader may ask whether this comparison is justified. Admittedly classical Roman law was concerned with a commercial economy rather than with the old agricultural economy, whereas the feudal system was a politico-socio-agricultural one. The Roman Empire was a city empire: the English is the villa expanded. Is it fair to compare the English feudal system with the Roman system of property. The former exclusively dealt with interests in land: chattel was never the subject of

tenure and no estates could be carved out of it, excepting through the doctrine of conversion and by means of trusts. On the other hand, land was but one of the kinds of '*res*' dealt with under the Law of things in the Roman scheme. If the English land law with all its complications and stratification of rights—largely a matter of history and political considerations and a subject of dread to any law student till the many vestiges of feudalism were swept away by Birkenhead legislation—is to be admired for such results as it has left behind, even as the institution of Trust is a result of the peculiar rivalry of English Courts, then the Indian system of land holding may also come in for a similar if not greater compliment. Here indeed there are greater complications with a succession of conquerors, each set trying to super-impose new rights and obligations on those existing over land, partly because of a lack of land survey and partly because of a freedom of gift known only to conquerors whose grip over the country was by no means sound and whose desire to dispossess existing holders therefore was not keen.

It may also be asked whether in the scheme of property in the modern society land will play the same part as it did formerly. It is true that by its character of immobility it has its significance in private as well as public law. It is subject at once to sovereignty and dominium. It will admit of stratification of rights because of its indestructible character. But even so, it will form only a small part of the whole idea of modern property, and its attributes cannot be easily transferred to other kinds of property, for this must largely depend on the character of the thing or the object sought to be protected.

Chapter IV deals with the modern juristic analysis of property. It traces the dwindling down of the notion of complete property as a result of social reservations—on account of the doctrine of police power, public necessity, taxing power and the right of eminent domain.

The expanding idea of property with special reference to the American law and definitions by American courts is discussed in the next chapter and Mr. Noyes is annoyed that this expansion is impeded by an archaic formula.

The substance and structure of property is examined in the next two chapters. The author again observes how Roman Law supplied a small part of the law but all the modern theory and English law the greater part of the law but little of the theory p. 413.

As the result of the survey he concludes that property is not a result of the acquisitive instinct in man but is the result of a conventionalised and organised power over human groups determined by propinquity p. 416,. and that it grew out of that form of organisation of persons called pre-property—itself a welding of social aggregate; a fundamental political, domestic and economic arrangement for the grouping of men and the objects upon the land p. 418. From this state the modern society is reached, says the author, with its triplicate organisation, its domestic or familial control, political or super-familial control and the economic organisation leading to property as control over material objects and employment or control over activities of men. p. 422. The question which form of control has been chief and which subordinate has depended according to him, upon which of these three elements, at any given time in the structure of society has conferred upon those who held the greater power over the rest of

society. He remarks that in Rome the power was first chiefly domestic and later political; in America chiefly economic; in England economic, and the domestic power accrued, in constantly lessening degree, to the political feudal aristocracy, pp. 424 and 425.

Before noticing the substance of the institution he points out how to-day property includes not merely patent and copyrights, trade marks and goodwill, but licenses, franchises and even membership of exchanges. So then "property is an elaborate social institution which presents a continuous sequence of development from the first record of custom and organisation of early society" and "law,....far from creating its varieties, is occupied only in defining, maintaining and validating them." "The substance of property," says Mr. Noyes, "consists of a certain system of relations among men which are devised, developed and practised in social economic life. These relations exist as independent phenomena... But the legal clothes in which this institution is wrapped, and the so-called legal rights, according to which these relations are analysed and classified when from time to time they need to be validated and protected are but conventionalised abstractions from the facts themselves," p. 18. As he observes in the introduction "The chips in the economic game today are not so much the physical good and actual services that they are exclusively considered in economic text-books, as they are the elaboration of legal relations which he calls property."

The author has made a careful and comprehensive study of the institution of property and its evolution and the book will prove useful both to students of economics and jurisprudence.

S. Subarmanium

National Income and Outlay, by Colin Clark. (Macmillan.) 12/6.

This is a stimulating book of great use to students of statistics connected with economic welfare and public finance. Estimates of national income of the United Kingdom have been made in the past by a number of persons from Gregory King in the seventeenth century to Dr. Bowley and Sir Josiah Stamp in the present century. But the data available to them were deficient in several ways; with the result that even Mr. Clark, who had published a book on the subject in 1932, thought it desirable to rewrite the book rather than bring upto date his former figures and conclusions. The great merit of the book is the meticulous attention paid to the various items of national income, which are at first sight likely to escape notice, and which therefore greatly add to the precision of the estimates. It is therefore a matter of regret that the book is marred by a number of misprints, many of which are perhaps due to transcribing the figures and the tables from the earlier book by the same author.

Nearly all the propositions of economic science, says Mr. Clark, are concerned with statements about the national income. The present work is devoted to the ascertainment of the national income of Great Britain and Northern Ireland, and the ways in which it is distributed and spent. After a careful study of the available figures, the author estimates that the net annual income rose from 4035 million pounds in 1924 to 4384

millions in 1929, fell to 3844 millions in 1932 (the bottom year during the period of slump), and again rose to 4530 millions in 1935.

An attempt is made to check the figure of annual income by that of total annual expenditure. We come across some curious items under the latter head. The craze for excitement is satisfied by 40 millions spent on betting (we know even members of the labour party are addicted to it), and 57 millions on other items of amusement. Hotel and restaurant take another 70 millions; sport and travel goods 31 millions; and newspapers 30 millions.

There follows a very interesting chapter on the distribution of the product of industry, on the lines of the famous attempt of Dr. Bowley in 1911. Compared to 1911 profits now take a lesser share and salaries a considerably increased share of the national income, which is accounted for partly by the replacement of independent employers by salaried managers under Joint Stock Companies, and partly by the increased number of salaried posts under the State. The share of wages oscillates with the trade-cycle, but represents about the same percentage to-day as in 1911. The share of the national income taken by rents of land and buildings fell low in the post-war years, but has since been rising; but even now it just covers the replacement costs of buildings. This will give food for thought to those who are interested in the study of land taxes and unearned increments.

The distribution of the national income may be personal instead of factorial or occupational. The personal distribution is very unequal; about one-half of the national income was annexed by ten per cent of the people, with incomes over £250 a year, and somewhat less than a quarter of the total income was annexed by less than 2 per cent of the population with incomes over £1,000 a year.

Chapter IX brings together most of the figures, and compares the real income " per person in work " for several years in terms of the prices of 1930. The home-produced income per head rose from £189·5 in 1924 to £215 in 1930; fell during the period of slump to a figure as low as £207; stood again at £217·7 in 1934; and rose to £225·7 in 1935, and £234·6 in 1936. To this may be added the income from overseas investments, which amounted to £16 per head in 1929, and £11 in more recent years. The decline has however been more than compensated by the improved terms of trade, *viz.*, a lesser fall in the price of exports than imports. But a considerable part of the average income per head has since 1929 been thrown away in the form of increased unemployment.

Another interesting chapter deals with " redistribution of income through taxation." Twenty-three per cent of the national income was taken by the State in 1935 in the form of direct and indirect taxes and local rates. Direct taxation, indirect taxation, and local rates contributed about equally to the total revenues in 1913; but the share of direct taxation at present is somewhat less than one-half. The working class family of five persons pays to-day on the average £16-18-0 a year in indirect taxation. In 1913 the working class (with annual incomes of less than £250) contributed more than the cost of the services from which they were the direct beneficiaries; to-day they contribute a little less than 80 per cent of the cost. This works out as a net re-distribution of £91 millions from the rich to the poor in the form of services. This may not be much, but we can

understand why socialism does not make headway in Great Britain. An estimate on similar lines for India should be very interesting.

A separate chapter is devoted to the accumulation of capital, which yields some startling results. In 1934 net investment was £225 millions, and in 1935, £305 millions. Nearly three-quarters of these amounts are represented by the undistributed profits of companies; and the balance by savings of the State and local authorities, savings through insurance, building society repayments, etc. "Large private incomes have ceased to count as a source of saving. Opinions may differ as to whether this is due to the present level of taxation, low interest rates or lack of investment opportunities; and whether an increase in taxation would lead to lowered consumption on the part of the rich, or an increasing rate of decumulation." And in the last chapter Mr. Clark observes that "the fundamental factors governing the rate of economic growth remain unknown. But at any rate it is possible to reach the negative conclusion, that the accumulation of capital is not the limiting factor."

A special chapter has been given to previous estimates of the national income from Gregory King downwards. The last two chapters are replete with shrewd observations of trend of things in the economic sphere, which are worth further investigation. It is clear that Mr. Clark enjoys facilities which are not even half available in India. The book is not very easy to digest, but will amply repay the pains taken over it, and will be a constant source of inspiration to those who have an inclination for statistical work to take in hand similar investigations in connection with the national incomes of other countries.

M. H. N.

THE THEORY OF INTERNATIONAL TRADE WITH ITS APPLICATIONS TO COMMERCIAL POLICY, by Gottfried Von Haberler, Associate Professor in Harvard University; Member of the Financial Section and Economic Intelligence Service of the League of Nations. Translated from the German by Alfred Stonier and Fredric Benham. William Hodge & Co,. Ltd., London, 1936. Price not mentioned.

Professor Haberler will earn the gratitude of students and teachers of Economics for meeting a long-felt need for a suitable and comprehensive text-book on the theory and problems of international trade and tariff policy in their essentially modern aspects. At the present time interventionism in the sphere of foreign trade, which is the logical outcome of modern economic nationalism, the break-down of the machinery of international monetary equilibrium, and the abnormal make-shift adjustments attempted by most nations for fighting the Great Depression have raised problems of international economic adjustment which it should be the business of the economist to study in all their intricate ramifications. There is no doubt that a rich harvest awaits an economist who tries to visualise the problems of international trade from a changed angle of vision against the new background of rapidly accumulating experience. Professor Haberler himself realises this when he says in his preface that "There is certainly a wide field of international economic problems which promises a rich crop if tilled with the aid of imperfect competition and business

cycle theory. The theory of commercial policy in particular will profit therefrom." Hence one is delighted to know that the learned professor hopes to break this new ground in a subsequent work. Nevertheless what he has attempted in this book has intrinsic value as a synthetic assimmilation of advanced economic thinking on the subject, of course within the limits of the traditional frame-work of the theory of international trade.

Professor Haberler starts with the discussion of the Monetary Theory of International Trade. In this respect he breaks away from tradition. But a modern student of Economics will surely agree with him when he refuses to assign to this branch of study a subsidiary place which it occupied in the frame-work of Ricardian analysis. Nowadays it is generally realised that the assumptions of the classical theory, *viz.*, that there is a fixed purchasing power parity based on fixed gold parity, that the internal structure of prices, production, wages and other money incomes is adjusted, in equilibrium, to such a fixed purchasing power parity, that the economic system has more or less complete resiliency, that the distribution of gold is equitable, that the unmanaged gold standard works in a frictionless manner, and that under such conditions state intervention is not necessary, are rarely fulfilled in modern times. In fact what we actually see before us is just the reverse of what was contemplated in classical analysis. Thus we observe the phenomena of closed economic systems based on national self-sufficiency, such systems being characterised by extreme rigidity of the economic structure which is the cause as well as the effect of cumulative protectionism and disharmony between the national price-levels. Hence when the gold standard has to be maintained in the face of such disharmony the entire process of re-adjustment of the national price-levels is deliberately resisted by exchange control, quotas and other protectionist devices with the direct object of maintaining the national scale of prices at a particularly high level. If such is the picture of international disequilibrium which has profoundly modified the channels and distribution of world trade one cannot but emphasise the importance of monetary theory as a prelude to Pure Theory. Professor Haberler has succeeded in giving us a good resumé of the monetary theory of international trade. But its modern bearings and implications have not been as fully brought out as one would wish. Out of one hundred pages devoted to this part of his exposition as many as fifty-nine have been devoted to the phenomena of inflation (particularly German) and the Transfer Problem, which, however important they might be as specific problems, seem to have been given too much importance in a general treatise. Moreover one misses very much a discussion of the monetary theory of the trade cycle with special reference to the theory of international trade. Professor Keynes and other eminent writers have shown the way, and I wish Professor Haberler had discussed at least some important aspects of this fruitful line of thought.

In the region of Pure Theory Professor Haberler's exposition is as illuminating as it is logical, systematic and comprehensive. For advanced students it will be a good substitute for the usual exposition found in current text-books. The refinement, elaboration and criticism of the classical theory are usually found in widely scattered literature which has been growing in volume in recent times. The author has lightened the task of the average student by summarising the relevant points of controversy emphasised by well-known writers. The interpretation of Mill's theory

and of Marshallian curves has several novel features. But to those who have been brought up on Marshallian Economics Professor Haberler's exposition of the Austrian Theory of Value and his attempt to show that the theory of international value is merely a special case of the general Austrian theory of equilibrium will appear illuminating, specially where he demonstrates that it is easily possible to discard the Labour Theory of Value in Pure Theory. One of the most instructive topics discussed in this part of the book is the question of terms of trade and their statistical measurement—a question which has a great practical bearing in a realistic study of international trade.

The third part of the book deals with trade policy. Here the author discusses the nature, technique and effects of interventionism in the sphere of foreign trade. The Indian reader who is not familiar with continental thought will find much valuable information bearing on various aspects of fiscal controversy. But an advanced student will miss here a treatment of this subject against the background of modern international disequilibrium which has moulded tariff policy into certain well defined types.

In connection with fiscal policy Professor Haberler raises an important controversy on pages 187—189 which would arrest the attention of an Indian reader, not only because the professor mentions India in the course of his argument, but also because the issue itself has direct bearing on India's commercial policy. The issue discussed here is whether the existence of unutilised means of production is an argument for tariff protection. I cannot help feeling that in dealing with this controversy the learned professor has yielded to facile doctrinairism and that what regards as the economic situation in India rests upon a misconception of the basic facts of the situation. One feels no hesitation in accepting the fundamental position that the fact that means of production are idle or unutilised does not *necessarily* raise the presumption that they should be utilised by artificial means. In Economics we think not of the *potential* demand for, or the *potential* supply of, means of production, but of the *effective* demand for, or the *effective* supply of such means of production. Now the effective supply of the means of production may be identified with the products of the economic organisation the function of which is to adapt scarce means to particular ends. Changes in industrial technique, on the one hand, and changes in the conditions of demand, on the other, are dynamic factors in this process of adaptation and equilibrium, and in this dynamic process many of the scarce means may remain unutilised, or many of them already utilised may become unemployed. Hence it is clear that, at a given point of time, economic forces tend to bring about not *maximum* but *optimum* utilisation of means of production. But at the same time we should recognise that the optimum is a position of particular equilibrium; it represents the maximum attained at a *given stage* of the adaptation of scarce means to existing ends; it implies utilisation of productive resources up to a point beyond which per capita income begins to decline. Judged in the light of these fundamental ideas the essential weakness of Professor Haberler's position becomes apparent. He says "one can scarcely conceive a situation in which all the means of production are utilised, every scrap of land being tilled, all plant and equipment, however old or obsolete being employed. and every deposit of coal, however poor, being mixed. *An approach to such a situation, such as perhaps exists in, say, China or India,* would be a sign of poverty and not, as Schüllers theory implies, a

symptom of abounding wealth." An Indian is likely to be bewildered when he is asked to believe that Indian poverty is due to the almost maximum utilisation of the means of production when his common experience tells him that his poverty is due to the existence of a vast mass of unutilised means of production which include resources, both absolutely unutilised and inadequately exploited. The fact is that Professor Haberler's theory does not obviously apply, as Keynes (whom he quotes on page 259) would say, to "An economic system which is neither in equilibrium nor in sight of equilibrium." Fundamentally the economic system in India is one that is "Neither in equilibrium nor in sight of equilibrium." Her economic life is moving along an ascending curve of optimum utilisation of productive resources, and she requires, *with the help of tariff* among other things, a re-adjustment of scarce means to ends in the direction of (1) Economy of man-power in agriculture and (2) Industrial development and absorption of surplus, under employed man-power.

In conclusion I venture to draw the attention of the author to a few misprints:—(1) On page 136 in the fourth line from the bottom the symbols have been misprinted in several cases. (2) The second paragraph on page 138 should be re-written. (3) In the second paragraph on page 146 the price of wheat should be given as $'934 (more correctly $'935) as in the table on the next page and not as $93'4, and the price of linen should be similarly $0'66 (more correctly $'666) and not $66⅔ as in the text. (4) In the same paragraph the United States is supposed to import 900 units of linen from Germany; but according to the table it is proper to suppose that U.S.A. imports 1540 units of linen and exports 900 units of wheat. (6) In the sixth column of the table given on page 147 the words "In $" should be omitted because the ratio can never be represented in terms of dollars.

B. N. GANGULI

BANKING AND INDUSTRIAL FINANCE IN INDIA, by Nabagopal Das, I.C.S., published by Modern Publishing Syndicate, 16-1, Shamacharan De Street, Calcutta. Price, Indian, Rs. 5, Foreign, 7s. 6d.

The book is divided into fourteen chapters covering 230 pages. The author, after a brief introductory chapter dealing with the fundamental problems of capital and industrial finance, gives in outline the organization of Indian Industries and their Finance before the Economic Transition. The author remarks and we agree with him, "Indeed, in the essentially rural economy of India the problem of financing these artisans and craftsmen did not arise at all. They were members of a homogeneous structure, the small isolated village republics, unknown to the world beyond their confines." This state prevailed in India for thousands of years at least from the Buddhistic times, if not earlier. In support of this statement we have the testimony of Mr. and Mrs. Rhys Davids, Dr. Fick, Dr. Vincent Smith, Prof. Hopkins and a host of other scholars, both foreign and Indian, including the translators of the Jatak Tales and of the inscriptions and sculptures of the time. The institutions of Trade and Craft guilds and of Sheths have continued to the modern times.

In Chapter III the author gives the decline of the old organization and the rise of the new agencies and finance. The industries, organized as they were, could not stand the competition of the machine made goods from the west. The people of the country had neither the knowledge nor the capital and enterprise to evolve a new order of industrial organization suited to the altered times. The whole industrial machinery, for a time, was thrown out of gear. The fact is that the western economic institutions were superimposed on the indigeneous forms. There was no evolution and spontaneous growth of the indigeneous institutions. The East India Company had the monopoly of Indian Trade and its servants carried on private trade as well. With the termination of the monopoly in 1813, and the prohibition in 1833, British capital and enterprise poured into the country. New Agency Houses sprang up and Plantation Industries were started. Thus the British Capital and Enterprise had to bear the first brunt and they consequently suffered heavy losses in the beginning.

Chapters IV and V give the development of Banking and Industrial Finance during the first half of the XIX Century (1806—60). The author maintains that "the money market was abundantly stocked and capital readily obtainable on easy terms whenever good and tangible securities were offered." The author concludes "all this shows how very dangerous it is to attribute the industrial stagnation of India upto about 1860 to the lack of credit facilities or to an alleged policy of banks deliberately to withhold credit from business or manufacturing interests." Inspite of this we find that this period has been the darkest period in the economic history of India. The causes are apparent. The indigeneous form of economic organization was given a rude shock in this period and the new form of economic order did not gain ground as yet—partly due to the apathy of the East India Company, and partly due to the lack of energy, enterprise and capital in the hands of the inhabitants of the country. It was thus the period of destruction, followed soon after by a period of construction.

Chapter VI describes the history of the early years of industrial development and the influx of foreign capital (1866—1905). During all these years Indian capital played a very unimportant part in the industrial development of the country, and, except for the solitary instance of the cotton textile industry of the Bombay Presidency, almost all the concerns were financed by British money and managed by British brains. These are hard facts and nobody can disagree with them. The causes given by the author are:

(1) Indians were accustomed to high rates of interest and small rates did not appeal to them.

(2) The average Indian investor was fond more of speculation and commerce than of pure industrial ventures.

(3) Very great importance was attached by the Indian investor to the question of safety and convenience. Acquisition of land and buildings was the favourite form of investment for the moneyed classes.

We think it was not so much the lure of high yield and safety devices as the ignorance of the people of the new form of industrial organisation. There was little of English education and the few who received it, got high appointments in the Government. The Indian business community

took to commerce—imports and exports—of the country as it was very paying in those days. Thus the organization of industries was left to the foreign capital and foreign enterprise. The foreigners depended little on the Indian capital and Indian skill.

Chapter VII deals with "the emergence of the 'problem' of industrial finance in India." According to the author two factors, besides the Swadeshi movement helped to accelerate the industrial re-awakening of India. The first was the improved position of the railways in India, but the most important of all according to the author, however, was new orientation in the industrial and economic policy of the Government.

According to our view the most important cause was the economic consciousness of the people and not the progressive policy of the State. The criticism of Dadabhai Naroji and R.C. Dutta, though a negative character, forcibly brought the economic problems to the forefront. The 'drain theory' and the 'exploitation of Indian industries' by the foreigner are quoted upto the present day.

The change in the economic policy of the State came during the Great War. The Government felt that India could help her masters better if her resources had been developed. The Industrial Commission made a thorough investigation into the problems of industrialisation of the country (1916-18). This was soon followed by the Fiscal Commission (1921-22) as a recommendation of which the Government adopted the policy of Discriminating Protection. Various other Commissions and Committees have been appointed since then, though without proportionate results. The fact is that India owes her Cotton Industry to the American Civil War, the Jute Industry to the Crimean War, and the Iron and Steel Industry to the European War. Other industries like Sugar, Paper and Pulp, Match, Cement etc. are the creation of the protective policy of the State followed since 1923.

Chapter VIII describes, in brief, the agencies of the money market, and Chapters IX and X the financial requirements of India's industries, large and small. They are mostly based on the Report of the Central Banking Enquiry Committee and comment is unnecessary. Chapter XI gives an account of the industrial finance in Great Britain, U.S.A., Germany and Japan, the industrially advanced countries of the world. Next, the author points out the chief handicaps and suggests remedies in Chapter XII. The main theme of the author is that existing financial facilities of the country are not inadequate, and that most of the allegations against banks are baseless. He suggests the establishment of a Central Bank which is already an accomplished fact. He thinks that the Imperial Bank should take upon itself a survey of the general industrial situation with a view to taking upon itself some of the work that is performed by German Credit Banks for industry in their country. So far there is no national Exchange Bank in the country and our learned author makes no mention of it whatever amongst the defects pointed out or the remedies suggested.

The author adds "without making any reflection on the soundness and honesty of Indian enterprise we may say that none of them have yet attained that tradition of stability which may warrant the grant of clean credits to them by the undoubtedly weaker banks of the country. We take strong objection to this view. When the public can deposit their small savings

with the Managing Agents at Ahmedabad, Bombay and other places, there is no reason why the banks should not be able to finance them on good security. People in the big cities freely deposit their savings with Family Firms and Shroffs. The fact is that the general public in India does not trust banks and the banks do not trust the Indian business men in general. There is no harmony and coordination between the two systems, the indigenous and the imported. The real need is to bring about this coordination, and this will be possible only when the shroff and the mahajan are recognised as parts of the banking machinery.

The author laughs at the idea of the establishment of an industrial bank in the country with any form of State assistance. He is a purist. He says, "direct financial participation of this nature by the State is of doubtful utility and it is important to recognise that if Government participates in, or guarantees, the capital issues of such a bank, it will have to poke its nose into affairs which should properly belong to individual enterprise......" Old repeated arguments! The author forgets that the world is changing fast and so are the economic notions. Even Great Britain, the protagonist of *laissez faire* and Free Trade, is a full-fledged protectionist country to-day. At present the States, world over, are poking their noses in economic matters. Here in this country we have to look up to the State even for social and religious legislation. There is a dire necessity of industrial banks in the country, and these institutions cannot be started without some kind of State support or backing. The U. P. and Bengal Provincial Governments are going to have industrial banks with Government guarantee of interest, though slightly for a different object. The U. P. Government will have a Marketing Corporation as well. It means the State is poking its nose in the ordinary merchandising of the Province. Our learned author adds that "the first essential is the question of an energetic body of entrepreneurs who are prepared to risk their own money and stand on their own feet, *i.e.*, without subsidy and without protection of any sort."

Our experience has been that given a little encouragement Indian capital and enterprise easily come forward. Take the case of the Sugar Industry, the new floatations of the paper mills one after the other in quick succession, the Cold Storages, etc. The capital was subscribed in no time, and that too by small investors.

We admit that what we need most is a class of entrepreneurs as we have the necessary markets, raw materials and even capital, but this capital and enterprise cannot come forward without some form of assurance or protection from the State.

K. L. G.

THE INDIAN SUGAR INDUSTRY (1936 Annual), by M. P. Gandhi. Price, Inland: Rs. 2-4, Foreign: 7s. 6d.

It is the second annual monograph on the Sugar Industry by Mr. Gandhi. Like the one of 1935, it contains a mine of information on the subject. At the outset, the author gives useful tables regarding the production, consumption per capita, imports, tariffs, etc., etc. The number of factories increased from 130 in 1934-35 to 139 in 1935-36 and 156 in 1936-37 (Est.); and the total production of sugar in India increased from 7,68,115 tons in 1934-35 to 8,49,000 tons in 1935-36 and 9,15,000

tons in 1936-37 (Est.). The imports have declined from over 9 lakh tons valued at about 16 crores of rupees in 1929-30 to about 2 lakh tons valued at less than 2 crores. The country has, except for the fastidious tastes of certain people, become self-sufficient. Mills are over-stocked at present. The acreage, under sugarcane in general and improved varieties of it in particular, has gone up. In the west U. P. cane has considerably replaced wheat. The percentage of sugar recovery is also steadily improving.

The author points out the causes that are responsible for checking the further development of the industry. According to him they are imposition of the excise duty, fear of continued imports from Java in spite of the protective duty, the passing of the Sugarcane Act of 1934, the fixation of the prices of sugarcane at unjustifiably high levels in U. P. and Behar, two of the most important sugar producing provinces in the country, etc., etc. To our mind the industry has reached a stage when the State must intervene and check the mushroom growth. What can we expect of the industry if it cannot stand on its own legs even with a protection of Rs. 9-1 per cwt? The Excise duty served well. The fact is that first class companies are making very good profits, whilst the inefficient ones have either come to grief or are fast approaching winding up. The external competition is giving place to the growing internal competition.

The most important problem of the many pointed out by the author is the utilization of molasses. If molasses could be converted into fuel on a commercial or economic basis, or used as fertiliser for *usar* lands, or fodder for animals, the industry has a very bright future. India is an agricultural country and a very large tract of her land has become *usar* land. If it could be turned into a green pasture, it would add crores of rupees per year to her national dividend. We hope the labours of Dr. Dhar and other scientists will prove fruitful.

K. L. G.

THE MARKET AND MARKETING, by E. C. Bhatty, published by Agrawal Press, Allahabad. Price As. 6.

THE ALLAHABAD COTTAGE INDUSTRIES, by the same author and the same publishers. Price As. 8.

Marketing has become an important branch of economic studies these days. It has received the attention of the Government as well. Mr. Bhatty gives in simple language the various functions of Marketing and illustrates them with Indian conditions. The book should be found useful for the beginners in economic studies, for whom, probably, it is meant.

K. L. G.

The second pamphlet on the Cottage Industries of Allahabad is the result of the survey carried on by the author. The main industries of the city are Stone Industry, Bamboo and Cane Industry, Biri Industry, Steel Trunk Industry and the Pottery Industry. The author has given in simple language and easy style a short account of every one of these industries. The book should be found helpful to the student of the subject.

K. L. G.

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AGE COMPOSITION AND SEX RATIO OF THE POPULATION IN THE BRITISH DISTRICTS OF THE BOMBAY PRESIDENCY.

BY

G. Raghava Rao.

Section I—Age Composition.

Of the various aspects of the composition of population, probably, the most important is age. In the first place, its productive capacity is dependent upon the proportion of its numbers who are in the earlier and the later age groups on the one hand, to those in the middle age group on the other. Children and old persons are non-workers in part or fully. They have, therefore, to be supported out of the income of persons in the middle age group, say, between ages 20 and 50. Naturally the burden upon the productive section of the community will depend, among other things, on the proportion of non-workers whom they have to support directly or indirectly. Moreover, the relative numbers of old men will influence the economic outlook and enterprise of a community. The larger the proportion of aged persons in positions of control and direction, in business, industry and social life, the greater would be the hold of old traditions and ways of life upon them, and slower would be the rate of their progress and the less violent the direction of their change. On the other hand preponderantly young population may lack that degree of stability of outlook, which is necessary to the achievement of permanent progress.

Secondly, the age composition of a population will have an important effect upon its habits of consumption. The proportions in which different types of commodities and services are demanded by a community depends as a whole and finally on the distribution of its total resources, human and material, over different lines of

production. "With fewer children and more old people there will be less need for baby carriages, less for toys and more for golf equipment, and knitting needles, while the profession of mortician will grow faster than that of obstetrician............ In fact a long list can be made of consumption habits which are affected in greater or lesser extent by the age of the consumer."[1]

Thirdly, the age structure of a population at any time determines in an important degree its rate of growth in the present and in the near future. The generation which comes into being does not descend from the whole of the old generation but only from a fraction represented by persons in the reproductive age groups. The larger the proportion of these persons to total population, the greater, other things being equal, its capacity to expand and conversely. Besides, since the incidence of mortality is less on persons in middle age group than on those in the earlier and later age groups, the general or crude death rate would depend upon the age composition of a population. Two populations, living under similar hygienic conditions and having similar specific death rates, would have different crude death rates, if their age compositions are different.

After these general remarks let us turn to an analysis of the population of the British Districts of the Bombay Presidency in the census year, 1931.

The following table shows the age distribution of population in the British Districts of the Bombay Presidency in the year 1931:

(1) Age in years	(2) [2] Bombay Presidency Br. Districts	(3) [3] England and Wales
0-1	647,732	610,650
1-5	2,600,847	2,393,900
5-10	2,819,745	3,318,600
10-15	2,476,229	3,214,300
15-20	1,951,538	3,435,900
20-30	4,061,681	6,925,800
30-40	3,218,217	5,830,300
40-50	2,053,777	5,211,700
50-60	1,175,643	4,504,900
60 & over	796,336	4,541,900
Total	21,801,745	39,988,000

1 P. 85, Proceedings of Population Union, 1931, Capt. Pitt-Rivers.

2 Figures in col. 2 compiled from Census of India, 1931, Vol. VIII, Pt. II, p. 97.

3 Figures in col. 3 compiled from the figures on p. 1, The Registrar General's Statistical Review of England and Wales for the year 1931 (New Annual Series No. 2) Tables, Pt. I Medical.

The following table gives the age composition of the above population taking the total of the population as 100,000:—

(1) Age	(2) Bombay Presidency Br. Districts	(3) England and Wales
0-1	2,971	1,527
1-5	11,930	5,985
5-10	12,934	8,299
10-15	11,356	8,038
15-20	8,952	8,592
20-30	18,631	17,320
30-40	14,762	14,580
40-50	9,420	13,034
50-60	5,393	11,266
60 & over	3,653	11,359
Total	100,000	100,000

In the Bombay Presidency as well as throughout India almost all the backward and depressed classes make their children work from the age of ten. If we consider all those aged below 10 years as dependents or non-workers there is a population of 6·07 million dependents out of the 21·8 million total population of the British Districts. Mortality is very high in the earlier age group of the population; mortality among infants in the British Districts was 237 per 1000 live births during 1931, that is, about one out of four children born in an year dies before it completes its first yeaı. This means not only a huge weste of economic resources, but also terrible human suffering and misery.

Persons aged 10 to 15 years and belonging to the lower and upper middle classes do not work. Out of the 2·48 million persons who are in this age group, some are non-workers and they should be considered as children.

The next group of non-productive population is of old persons. Assuming that 60 is normally the age at which people retire from active life, the number of old persons was 0·8 million in 1931. Of these the largest proportion must have been living in part or wholly upon the income of others. As the old persons do not form even 4 per cent of the total population their influence upon the psychological make-up of the population is practically small. Dr. W. S. Thompson's view,[4] that "the great conservatism

4 Population Problems, p. 58.

of France in business, in family life, in standards of living, and in many other respects, is in any way related to the larger proportion of old people in its (French) population," is not applicable to the population of the Bombay Presidency.

12·45 millions or more than half the total population was aged 15—60, a period of active working life.

The effect of the present age composition of our population on crude or general death rate can be ascertained by applying the specific age death rates of another population to the actually existing population of this presidency. In 1931, the crude death rate of the population of England and Wales was 12·3 per mille, whereas the crude death rate of the population of this presidency was 23·7. But by applying the specific death rates of England and Wales in 1931 to our population in the same year our crude death rate falls to 8·43, a rate far lower than that of the former country. This is due to the low percentage of population aged 60 and over to total population in this Presidency. Although the present age composition of our population hinders us to some extent to have a high income *per capita*, it enables us to have a low crude death-rate (if crude death rate signifies anything).

Accuracy of age statistics.

The inaccuracy of age returns of the Indian census is well known. First a large percentage of the population of this presidency is illiterate. Secondly, though there is provision for the official recording of births, it is well known that a large number of cases of natality escape these records. Thirdly, there is a traditional reticence among all sections of the Indian population regarding the mention of a person's age. Fourthly, persons at certain ages and in certain conditions of life have a tendency either to overstate or to understate their actual age. Fifthly, there is almost in all countries excepting the most highly advanced a tendency on the part of individuals to prefer certain digits in stating their ages. These intentional and non-intentional misstatements of age render the reported statistics extremely unreliable. They have to be corrected and graduated by actuarial calculations.

Some idea of the amount of inaccuracy which lurks in the recorded age returns of this presidency can be had by the application of a simple test to these returns. In the following table[5] we have the per mille distribution of two sections of the population (males), namely, Hindus and Muslims of this

5 P. 84, Census Report of the Bombay Presidency, 1931.

presidency, in 1931, according to the actuarial tables, and according to the census:—

(1) Age group	Hindus (2) Per mille distribution in the actuarial tables, 1931	(Males) (3) Per mille distribution of census population in 1931	Muslims (4) Per mille distribution in actuarial tables, 1931	(Males) (5) Per mille distribution of census population, 1931
0-10	277	274	278	265
10-20	217	205	218	198
20-30	184	180	186	194
30-40	141	153	140	162
40-50	95	98	92	97
50-60	54	55	53	50
60 & over	32	35	33	34

The age composition of a population at any time is the result of past factors affecting the birth rate, specific age death rates and the volume of migration into and out of the area. Specific death rates can be altered relatively to one another, by causes affecting the mortality of the people. Variations in birth rate are due proximately to changes in the rate of marriage and/or changes in fertility per marriage. Change in marriage rate can be due to changes in the proportion of people in the marriageable ages and/or changes in the proportion of people willing to marry.

Of the factors which have affected the growth and the age composition of the population of this presidency the most important have been famines and epidemics. The changes in age composition caused by these factors take place in a population which as a whole has also fluctuated from decade to decade. The effect of the general rise or fall is to modify the influence of the special causes upon the relative proportions of individual age groups. A general rise would tend to enhance the increments and to diminish the decrements. A general fall would have the converse effect. It is hardly possible to distinguish the separate effects of these factors. Still an attempt is made to study them as far as possible in order to arrive at some conception of a normal age composition of the population of this presidency.

The effect of famines on the birth rate and the death rate is very well described in the following lines:—"When a tract is afflicted by famine the mortality rises in a greater or less degree according to the severity and duration of the calamity and the effectiveness of the measures taken to mitigate it. All sections of the population, however, are not equally affected; the very old and the very young suffer most while those in the prime of life sustain only a comparatively small diminution in their numbers....................Consequently at the close of a famine the population consists of an unusually small proportion of children and old persons and of a large proportion of persons in the prime of life, *i.e.*, at the reproductive age. For some years, therefore, in the absence of any fresh calamity, the growth of the population is very rapid. The number of persons capable of adding to the population not having been much affected, the actual number of births is very little less than before the famine, but the proportion calculated on the diminished population is much greater, and so too is the excess of births over deaths, as the latter are much below the average in a population consisting of an unusually large proportion of healthy persons who by reason of youth, old age, or infirmity have a relatively short expectation of life. This rapid rate of growth continues for some years, but then, as the persons who at the time of the famine were in their prime pass into old age and their place is taken by the generation born shortly before the famine with its numbers greatly reduced by the mortality which then occurred, the birth rate falls, not only below that of the years following the famine, but also below the average. The disturbance of normal conditions is still not ended, and the pendulum continues to swing backwards and forwards between periods of high and low birth rates, but its oscillations gradually become fainter until they cease from natural causes to be apparent or as more often happens, until some fresh calamity obliterates them."[6]

Famines are also regarded as lowering the facundity of the people. The Census Commissioner of India, 1911, says, "lastly during a famine there is a great diminution in their facundity with the result that there are fewer deaths than usual from child-birth."[7] Finally they affect the rate of marriages and consequently the birth rate. "Marriages in large families have become less frequent in Gujarat owing to the expense involved in wedding ceremonies and dowries."

6 Census Report of India, 1901, Vol. I, pp. 474-475.

7 P. 212, Census Report of India, 1911.

The following table shows the effect of famines in this presidency on age composition of its population at the last seven censuses:—

Population in millions[8]

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age group	1872	1881	1891	1901	1911	1921	1931
	N	F		F			
0-10	**5·9**	**4·6**	5·5	**4·8**	5·3	5·2	**6·1**
10-20	2·4	**3·2**	**3·3**	3·7	**3·6**	3·6	**4·4**
20-30	3·2	3·0	**3·4**	**3·3**	3·7	**3·4**	**4·1**
30-40	2·2	2·5	2·8	**2·8**	**3·0**	**3·0**	**3·2**
40-50	1·4	1·5	2·0	1·9	**2·0**	**1·9**	**2·1**
50-60	0·8	1·0	1·1	1·1	1·2	**1·2**	**1·2**
60 & over	0·5	0·7	0·9	0·8	0·9	0·9	**0·8**
Total	16·2	16·5	18·9	18·5	19·7	19·3	21·8

F = Famine year; N = Normal year; E = Epidemic year.

The percentage age distribution of population is given below:—

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age group	1872	1881	1891	1901	1911	1921	1931
	N	F		F			
0-10	**36·0**	**27·9**	29·0	**26·1**	27·0	27·1	**27·8**
10-20	14·6	**19·4**	**17·3**	20·2	**18·3**	**18·0**	**20·4**
20-30	19·5	18·2	**18·0**	**17·9**	18·8	**17·9**	**18·5**
30-40	13·4	15·2	14·7	**15·2**	**15·2**	**15·6**	**14·8**
40-50	8·5	9·1	10·5	10·3	**10·2**	**10·0**	**9·4**
50-60	4·9	6·1	5·8	6·0	6·1	**6·0**	**5·4**
60 & over	3·0	4·1	4·7	4·3	4·1	5·4	**3·7**

To understand fully the changes in the age composition of the population at different censuses we should know the various factors that had affected our population.

8 Census Reports of the Bombay Presidency.

A famine came in 1877-78 and devastated the Deccan and the Karnatak. After that there was no calamity till 1896, when plague spread all over the province and continued to prevail till the end of 1904. The second famine came in 1899 and continued till the end of 1902. It affected mainly Gujarat, Khandesh, the North-East Deccan, and the South-East of Sind. The first decade of this century, 1901-1911, was on the whole a period of prosperity, although plague prevailed somewhat severely here and there till 1904 and crops failed partially in 1907. Prosperity continued till another plague broke out in a virulent form in 1916 and continued for 2 years. A mild type of influenza prevailed in July 1918. After a short time it became very virulent and carried away more than a million population. In addition to these epidemics, famine conditions prevailed in 1918-19 almost throughout the presidency. The remaining period of our study was practically free from epidemics and famines. Favourable and unfavourable agricultural seasons alternated and hence there was no misery.

The famine of 1877-78 adversely affected the age group 0-10 in the population of 1881 in two ways by reducing the number of marriages and by raising child mortality. The low proportion of children to the total population in 1881 remained as a permanent scar of a wound on the populations at later censuses. It is evident from the deficiency in the percentage age distribution of this section of population in each descending age group in successive censuses when compared with the percentage in the same age group at the immediately preceding census. The percentage of population aged 10—20 to the total population in 1891 is less than the percentage of the population in the same age group to total population in 1881. The percentage of population aged 20—30 to total population in 1901 is less than the percentage of population aged 20—30 to total population in 1891. The same feature is noticed in each descending age group, 30—40 of 1911, 40—50 of 1921 and 50—60 of 1931. The percentage of the population aged 60 and over to the total population of 1941 will be lower than the percentage of population of the same age to total population of 1931. This phenomenon can be understood clearly by examining the data in the previous table.

The indirect and secondary effect of the famine of 1877-78 is a reduction in the size of population in the reproductive age groups 20—30 of 1901, 30—40 of 1911 (the plague of 1896—1904 reduced directly the population in the age group 30—40 of 1901) and 40—50 of 1921. This explains a part of

the decrease in the proportions of children aged 0—10 to total population in years 1901 to 1921.

Before the conditions of natality became normal another famine came in 1899—1901. It also killed many children, besides reducing the number of marriages and consequently births. The deficiency in the percentage of children aged 0—10 to the total population of 1901 continued as deficiency of population in successive later age groups at successive later censuses.[9] The percentage of population in the age group 10—20 in the population of 1911 is less than the percentage of population in the same age group of 1901. Similarly the percentage of population aged 20—30 to total population in 1921 is lower than the percentage of the same group to total population of 1911. The same feature is found in the population aged 30—40 in 1931.

While the effects of these two famines were operating on our natality conditions and age composition of population, influenza and plague broke out in 1918—19 and directly reduced the number of births by carrying away specially women in the reproductive age, 30—40. This phenomenon is partly responsible for the lower proportion of children to total population in 1921. This deficiency of children in 1921 began another wave of decrease in descending age groups.

The continuing results of famines and epidemics on the age composition of population at succeeding censuses cannot be traced very vividly because some new changes (adverse or favourable) in economic and general vital conditions affect reproduction and specific death rates. Hence the effect of a particular factor, say famine, on the age composition of population is mixed up with the effects of some factors which came into existence earlier or later.

In spite of the direct and indirect effects of famines and epidemics, we can ascertain the normal age composition of our population.

By normal age composition of population is meant an age distribution of population living under conditions more or less normal of migration, natality and mortality. Since the direct effect of abnormal conditions of natality and mortality (and migration) continues for at least 60 years, if not more, we should select a census population which has been free from abnormal conditions, mentioned already, continuously for more than 60 years. In the Bombay Presidency famines and epidemics occur

9 This is shown in the 2nd table on page 115.

often with short intervals. So at none of the last seven censuses we have a population unaffected by famines, epidemics etc.

But we can, however, obtain an age distribution of population unaffected by abnormal factors, but yet influenced by only the general vital conditions during a period of 60 years. This can be had by selecting a section of the population aged 0—10 years on the census day. First it should be a group unaffected till then directly and indirectly by famines, epidemics etc. Secondly, this section of population should never be affected by abnormal conditions in the full span of their life, which is, of course, more than 60 years. The gradual movement of this particular section of population into older and older age groups as time passes shows the age composition of a normal population or population living under normal conditions of mortality, natality etc. The section of population aged 60 and over in the total population enumerated 60 years after is only a small portion of the lot aged 0—10 selected for our study.

The age group 0—10 of 1872 census population of Bombay Presidency is selected for our study. It was affected slightly by immigration during 1881—91 and also slightly by plague during 1896—1904. Yet, it satisfies almost all the other requisites. It is the best population we can get. Its movement into older groups in course of time is shown below:—

Age Group	*Population in millions*						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	1872	1881	1891	1901	1911	1921	1931
0-10	5·9						
10-20		3·2					
20-30			3·4				
30-40				2·8			
40-50					2·0		
50-60						1·2	
60-70							0·7

The slight bump in the age group 20—30 of the population of 1891 may be chiefly due to migration. By drawing a smooth graph so as to eliminate the factor of migration we get 3·0 in the age group 20—30 of 1891 instead of 3.4. We excluded the effects of the plague of 1896—1904, because it was not very

virulent throughout the presidency. Now we re-arrange the age composition of the normal population as below:—

Population living during 1872—1931

Age Group	Population in millions	Percentage age distribution of population
(1)	(2)	(3)
0-10	5·9	31·1
10-20	3·2	17·0
20-30	3·0	15·8
30-40	2·8	14·8
40-50	2·0	10·6
50-60	1·2	6·5
60-70	0·7	4·2
Total	18·8	100·0

Before we pass on to the significance of this normal age composition let us ascertain the *average age composition* of our population (the average of 1872—1931) which considers all the normal and abnormal events during the last 60 years. The average age composition may indicate the future movement of population better than the normal age composition. This can be obtained by finding the averages[10] of the percentages in the seven census populations in the same age groups. The following table shows the average age composition:—.

(1)	(2)
Age Group	Percentage age distribution
0-10	28·7
10-20	18·3
20-30	18·4
30-40	14·9
40-50	9·7
50-60	5·8
60 & over	4·2

10 Add the seven percentage figures in the same age group and divide the total by 7. Then we get the average percentage age distribution in a particular age group. Repeat the same for other age group also.

This average age composition differs from the normal age composition as well as from the age composition of the census population of 1931.

(1) Age group	(2) Average age composition	(3) Normal age composition	(4) Census age composition
0-20	47·0	48·1	48·2
20-50	43·0	41·2	42·5
50 & over	10·0	10·7	9·1

This table shows that the population aged 0—20 is 1·7 times the population aged 20—50 in normal population, whereas in the average population the section of population aged 0—20 is only 1·09 times the next section of population aged 20—50. After 2 or 3 decades the census population of the Bombay Presidency will become normal (if no calamity occurs hereafter). This leads us to infer that hereafter there will be an increase in the proportion of children aged 0—20 to the population aged 20—50.[11]

Dr. Gustav Sundbarg of Uppsala University established in 1899 a theory of relation between age composition and movement of population. After studying the vital statistics of Sweden, covering the most extensive period one can consult, he found that a standard normal population living under conditions more or less normal of migration and increase, has the following age composition[12]:—

(1) Age group	(2) Percentage age distribution
0-5	12·70
5-15	20·94
15-20	9·25
20-50	40·64
50-60	8·22
60 & over	8·27

11 Under normal conditions this implies a reproduction rate higher than the present one.

12 Page 55, "A Census of the Empire"—J. A. Baines, Journal of the Royal Statistical Society, 1903.

He found that generally the population aged 15—50 is half the total population. Changes are found only in the percentages of population in the groups 0—15 and 50 and over to total population. In increasing population percentage age distribution in the three successive groups is 40, 50 and 10. In stationary population the age distribution is 33, 50 and 17 respectively. A decreasing population has 20, 50 and 30 respectively.

The size of the youngest group indicates net reproduction rate (births and child mortality considered together) of total population, while the second group which corresponds to reproductive period, denotes the present potentiality of population to increase.

Generally females begin reproduction at the age 15 and cease reproduction at 45. But while studying a population which consists of both males and females we should consider the reproductive age period of males also. It may be better to put 20—50 as the reproductive age period of total population (males and females) than 15—50. The final group, which is generally the smallest, could have been neglected, because it affects the growth of population neither by reproduction nor considerably by mortality.

Sundbarg works out his theory on the assumption that the rates of mortality are the same in the two age groups at the extremities of life. The middle group, which actually increases population by means of births, is the healthiest. The proportion of its size to total population changes least. So he inferred that age composition does not affect total mortality rate or crude death rate but affects only birth rate.

The assumption that death rate is the same in the earliest group 0—15 and the final group 50 and over is incorrect. The fall in death rate from the group 0—1 to 10—15 is more rapid than its rise from the group 50—60 to 60 and over. In addition to this, death rate in children group is reduced appreciably by means of recent advancement in medical science, but reduction in the death rate in the final two groups is less.

Sundbarg lumps up seven quinquennial age groups into one age group 15—50. The sizes of these groups are not uniform. The reproduction rates also in these groups are not uniform. Hence general reproduction rate changes whenever the age composition and the specific reproduction rates in these seven groups change, although the proportion of the size of the group 15—50 to the total population remains constant.

Another flaw in this theory is the insufficient consideration it gives to conditions of expectation of life. Expectation of life

differs from age to age. The expectation at birth is not the same as at the age 14 or 15. Similarly expectation of life is not uniform throughout the seven quinquennial reproductive age groups.

The movement of population can be understood better by examining the sizes of all the quinquennial age groups up to the end of reproductive period, than by examining Sundbarg's three broad groups. A study of the percentage age distribution of our population in the quinquennial groups can be fruitful only after an elaborate study of the different rates of population movements and different distributions of population in quinquennial age groups. There is another method, Kuczynski's net fertility rates, explained elsewhere, which can best indicate the movement of population.

We find that our youngest group 0—20 in the average population of 1872—1931 is 1·094 times the population aged 20—50 (and 1·17 times the population aged 20—50 in normal population), while in the normal age composition of the stationary population ascertained by Sundbarg, the group 0—20 is 1·057 times the next age group 20—50. This being the feature of the age composition of our population we infer that our population will increase rapidly if average conditions of living continue.

We shall notice the age composition existing in 1931 in the five natural divisions of the Presidency. The figures in the following table are compiled from the district age figures given on pp. 103—106 of Part II, Vol. VIII of the Census of India, 1931.

(1) Division.	(2) Total Population.	(3) Population aged 0-15	(4) P. c. of figures in col. 3 to figures in col. 2.	(5) Population aged 60 & over.	(6) P. c. of figures in col. 5 to figures in col. 2.
Gujarat	3,147,992	1,244,526	39·5	108,443	3·4
Deccan	8,029,738	3,263,601	40·0	313,826	3·9
Karnatak	3,048,598	1,223,141	40·0	126,203	4·1
Konkan	2,349,083	952,036	40·5	102,760	4·4
Sind	3,887,070	1,520,466	39·1	124,122	3·2

The highest percentage of children noted in the Deccan is to some extent due to the existence therein of the largest percentage of married women aged 15—40 to the total female population (35·8 per cent). The hilly region of this division is very famous

for healthy and robust persons. Specially Satara where persons aged 60 and over form 5 per cent of the population is the district from which Shivaji recruited most of his soldiers. Konkan compared with Karnatak has a larger percentage of children and old persons. Many of the youths and middle-aged persons of Kolaba and Ratnagiri Districts emigrate to Bombay City and so those districts have a large percentage of children and old persons.

The following table gives the age composition of the population in the cities of the presidency in 1931:—

(1) Age in years.	(2) Bombay City.	(3) Poona.	(4) Karachi.	(5) Sholapur.	(6) Bombay Suburban Dist.	(7) British Dists.
0-1	16,226	4,385	6,718	4,344	4,016	647,732
1-5	87,112	16,581	27,627	15,064	17,595	2,600,847
5-10	93,921	18,129	28,171	15,776	18,566	2,819,745
10-15	86,031	17,544	24,918	14,965	17,302	2,476,229
15-20	115,323	18,015	24,961	14,660	18,331	1,951,538
20-30	332,120	35,114	55,909	28,663	42,542	4,061,681
30-40	264,426	25,538	40,671	19,527	32,309	3,218,2I7
40-50	107,602	14,797	21,969	11,672	16,780	2,053,777
50-60	40,490	7,794	10,595	6,374	7,937	1,175,643
60 & over	17,836	4,924	6,352	4,529	7,146	796,336
Total	1,161,383[13]	162,901	247,791	135,574	179,524[14]	21,803,388

13 Figures in cols. 2, 3, 4 and 5 from pp. 167, 261, 232, 280 of the Census Report of the cities of the Bombay Presidency, 1931.

14 Figures in cols. 6 and 7 from pp. 105 and 97, Part II, Vol. VIII, Census of India, 1931.

For purposes of comparison the data of the above table are reduced to a mileage basis in the following table:—

(1) Age	(2) Bombay City	(3) Poona	(4) Karachi	(5) Sholapur	(6) Bombay Suburban Dist.	(7) British Districts
0-1	14	27	27	32	22	30
1-5	75	102	111	112	98	119
5-10	81	111	114	117	103	129
10-15	74	108	101	113	97	114
15-20	99	111	101	109	102	90
20-30	287	215	225	212	237	186
30-40	227	157	164	134	180	148
40-50	92	91	89	87	93	94
50-60	35	48	42	47	44	54
60 & over.	16	30	25	24	23	37
Total	1,000	1,000	1,000	1,000	1,000	1,000

For the sake of comparison we have introduced in the above data the figures of the British Districts of the Bombay Presidency, which is composed of rural and urban areas, and also the figures of the Bombay Suburban District which is an overgrowth of the Bombay City, distinct from a city as well as a rural district. The cities dealt with being centres of economic activity and with high cost of living, do not receive and maintain the same proportions of children and old people to the total population as are found in the province as a whole.

Section II—Sex Ratio.

In 1931 there were only 90·2 females per 100 males in the British Districts of the Bombay Presidency, while there were more than 110·5 females per 100 males in England and Wales. The percentage of females to total population in the natural

divisions of the presidency in 1931 is given in the following table:—

(1) Division	(2) Percentage of females to total population
Konkan	51·6
Deccan	49·1
Karnatak	49·0
Gujarat	48·0
Sind	43·9
British Districts of the Presidency.	47·4

This disparity calls for some explanation.

Konkan has more females than males because in February when the census was taken many of the males of that division were working in the Bombay City and elsewhere. The remarkable deficiency of females in Sind is largely attributable to faulty enumeration.[15] The deficiency of females in the total population is primarily due to the difference in the death rates according to sex and not to the difference in the sex ratio at birth. Excluding Sind where vital statistics are less accurate than in the presidency proper, the percentage of female births to total births in the various districts varies from 48 per cent to 49 per cent. Fewer females are born. Yet this deficiency is made up by a lower death rate among females. Females have more death-resisting capacity than males, except in the reproductive age group. Wherever the ratio of death rate of females to the death rate of males varies, sex ratio of population changes.

The sex ratio is influenced by emigration and immigration also. The percentage of female immigrants to total immigrants from neighbouring and adjoining districts is higher than the corresponding percentage of those coming from distant places. A large percentage of the immigrants are males, exception being in cases where there is more demand for the labour of females than for the labour of males. Most of the temporary immigrants are males, and as migration becomes more permanent the sex ratio approaches equality. Immigration and emigration which play a trivial part in the movement of the population of the presidency

15 Census Report of the Bombay Presidency, 1931, p. 116.

do not seem to influence much the sex composition of the total population.

In cities where living is very costly and one cannot afford enough money to live with his wife, females form a very low percentage to total population. Exception is only in the case of cities where there is more demand for the labour of females than that of males.

The following table shows the percentage of females to total population in 1931 in the cities of the presidency:—

(1) City	(2) P. c. of females to total population
Sholapur	46·9
Poona (excluding Cantonment)	45·7
Karachi	41·4
Bombay	35·7

The table shows a decreasing percentage of females to total population as we pass from the less to the more important cities.

Disparity in sex ratio affects production as well as consumption. Females have a greater aptitude than males for certain occupations such as nursing, while generally males are suited for heavy work. Males are capable of turning out more hard work than females; but when the technique of production has been highly improved, the labourer need not be necessarily strong physically and intellectually, and sex may not have any direct effect on production. Regarding consumption, females require more toilette and more dress than males. Their consumption goods are somewhat different from those of males. All these differences between the two sexes affect the economic life of a people. But we have no information regarding these aspects of the problem in relation to the population of the Bombay Presidency.

While studying population problems, sex ratio deserves consideration to the extent that it affects the growth of population through birth rate and death rate. Polyandry in some countries is explained away as resulting from an excess of females over males. Polygamy is ascribed to the deficiency of females. Whatever be the form of marriage, females are the agents of increasing the population. Not every female, however, but mostly those aged 15—40 (in India) have the capacity for

reproduction.[16] So the percentage of females aged 15—40 to total population is more important than the ratio of females of all ages to males of all ages. The percentage of females aged 15—40 to total population was only 20 in this presidency while in England and Wales it was 24·6 in 1931. Hence the sex ratio of this presidency considered by itself is less favourable than that of England and Wales for the growth of population. The following table shows the percentage of females aged 15—40 to total population and also the percentage of total females to total population in the cities of the presidency in 1931:—

(1) City		(2) P.c. of females aged 15 - 40 to total population	(3) P.c. of total females to total population
Sholapur	...	21·0	46·9
Poona	...	21·7	45·6
Karachi	...	18·5	41·4
Bombay	...	19·9	35·7
British Districts.		20·0	47·4

Though there is much difference between the sex ratio in the British Districts of the Presidency and that in Bombay City, the percentage of females aged 15—40 to total population is practically the same in the two. This is due to the migration of females in the adult period of life into the city in search of work in factories etc. The deficiency of females in Karachi is to some extent due to the causes attributable to the deficiency of females throughout Sind.

Now we shall see how the percentage of females aged 15—40 to the total population has been changing during 1901—31.

(1) Year	(2) P.c. of females aged 15-40 to total population	(3) P. c. of females to total population
1901	19·6	48·5
1911	20·0	47·8
1921	19·0	47·4
1931	20·0	47·4

16 (*a*) Some Vital Aspects of Population Problem by Mankad—Journal of the Bombay University, 1935, Vol. II, Part IV.

(*b*) The Census Superintendent of the Bombay Presidency takes 15—35 as reproductive age period.

(*c*) The Public Health Commissioner with the Government of India, 1933, (p. 15 of his Annual Report) takes 15—40 as reproductive age.

(*d*) Dr. G. S. Ghurye and Mr. Deshpande find that reproduction ceases before the female is aged 40. (Indian Journal of Economics, 1931.)

From column 3 of the table it appears that the percentage of females to the total population has been decreasing during the last 30 years. But the percentage of females in the reproductive age group has remained more or less steady. This implies that the females in the reproductive age period now constitute a large proportion of total females and the loss in the capacity to increase of the population due to a fall in the sex ratio is averted by a relative increase in the proportion of women in the reproductive ages.

THE PROBLEM OF CORRELATION BETWEEN EXCHANGE RATES AND EXPORTS

AN ANALYSIS OF INDIAN STATISTICS IN ITS BEARINGS ON ECONOMIC THEORY*

BY

BENOY KUMAR SARKAR

The Theory of Inverse Correlation.

Towards the end of September 1936 the franc was devalued in France and along with it the Swiss franc and the Dutch guilder. The obstinate " gold bloc " came thus in line with the off-gold countries. These devaluations constitute but the last stage in the process which commenced in October 1931 with the United Kingdom (as well as India), and was taken up by the U.S.A. in March 1933. Germany has not formally abandoned the gold standard. But as is well known, the privileges granted by Germany to her traders on the international market since 1934 constitute a factual 33 per cent devaluation (cf. " Register-Mark," " scrips," and other facilities). Altogether, we have, then, another occasion for an investigation into the problem of correlation between exchange rates and the export trade.

In economic theory no generalization is perhaps more accepted as a universal postulate than that which seeks to render the exports of a country the *function* of its exchange rates. The alleged economic law can be formulated in two main parts as follows:

1. Higher exchange = $-$exports.
   = hindrance to and diminution of exports
2. Lower exchange = $+$exports.
   = incentive to and expansion of exports.

In the business world of every country no economic law is more popular than the one indicated in the above correlations which embody the facts of the fall in and stimulation of exports according to the rise and fall respectively of the rate of exchange. The correlation between exchange and exports is taken to be inverse.

It is the object of the present paper to examine the validity of this alleged correlation of an inverse character. We propose,

* A paper for the Twentieth Indian Economic Conference, Agra, December 31, 1936—January 2, 1937.

therefore, to analyze some of the recent Indian foreign trade statistics in the perspective of the exchange-rates.

It may indeed be conceded to deductive reasoning that as soon as the Rupee becomes high compared, say, to Sterling, the foreigner has to pay more in Sterling for the Indian goods if the price be calculated in Rupees. In other words, Indian goods become dearer to the parties that have to make purchases with Sterling. The consequence should be a fall in the foreign demand, which is tantamount to saying that the exports will tend to diminish in quantity. This tendency to the diminution of exports on account of high exchange (which is sometimes an item in deflation) has indeed constituted the argument of all those economists and statesmen who in almost every post-war country, in Austria, in Czechoslovakia, in Germany, in France, in the Balkan states, in Italy, and even in England advocated inflation (implying lower exchange) in order to furnish a stimulus to exports.

In "gold-exchange standard" countries like India (down to 1926) one might argue that the prices of export-goods are calculated not in the currency of the country itself, *i.e.*, not in Rupees but in terms of the international medium of exchange, *viz.*, gold, say, dollar or sterling. And therefore as soon as there is high exchange the Indian exporters, in other words, as a rule the agriculturists should have to be satisfied with a lesser number of Rupees for the same amount of goods because Sterling is low compared to the Rupee.

Thus arguing, we should expect agriculture to be a less and less profitable concern and the agricultural output diminishing in quantity. The natural consequence to international trade should not fail to make its appearance. It ought to manifest itself in the tendency of India's exports to diminish.

We thus come to the same position as we had in the previous consideration. That is, whether the prices of Indian exports be calculated in terms of gold or in terms of Rupee, a high exchange (*i.e.*, the command over a greater number of, say, pennies per Rupee) should prove to be a damper on India's export-trade.

It should be observed at once that this speculative reasoning, Ricardian as it is, can be considerably neutralized by another argument, equally Ricardian. For, as Truchy[1] puts it, *la prime à l'exportation ne dure que le temps nécessaire à l'adaptation des prix interieurs* (the premium on exports offered by the depreciation of currency does not last longer than the time

1 *Review of the Trade of India in 1924-25* (Calcutta, 1925), Tables Nos. 7, 28—41.

necessary for the adjustment of internal prices). Besides, it furnishes to external sales but an artificial spur, the cessation of which may give rise to serious damages.

The Realities of Direct Correlation (1914—25).

In any case, the Indian figures tell us that exports neither declined in volume, say, during the period 1914—25 nor did they yield a lesser and lesser number of Rupees.[2]

The war-average in the export of grain (rice, wheat, barley etc.) gave the figure 3,141,000 tons. In 1923-24 it rose to 3,429,000 tons and in 1924-25 to 4,260,000 tons. And the total Rupee prices received by India rose from 344,180,000 to 508,715,000 and 650,604,000 respectively.

The essential seeds were exported to the extent of 708,000 tons per year during the war-period, 1,177,000 tons in 1922-23, 1,255,000 tons in 1923-24 and 1,328,000 tons in 1924-25. And the Rupee yields for the corresponding years were 121,742,000, 273,538,000, 298,172,000 and 331,685,000 respectively.

The total value of exports, again, does not indicate any tendency of decline. On the contrary, beginning with Rs. 2,159,670,000 per year during the war-period, it successively rose to Rs. 2,991,619,000, Rs. 3,488,301,000 and Rs. 3,846,653,000 in subsequent years.

The significance of these rises in exports in the currency-history of India will be clear if we place these increases in the figures (both in *quantum* and Rupees) for exports in the perspective of the exchange-curve during the corresponding periods. All this time, as we are aware, the Rupee was steadily rising in relation to Sterling. From 16, 28/32d. in January 1923 it rose to 17, 17/32d. in December 1923, 18, 14/32d. in December 1924 and 18, 16/32d. in December 1925.

The situation, therefore, is curious. The exports increased both in volume and Rupee-price at a time while the exchange was rising too. But our theory should lead us to expect quite the reverse, *i.e.*, an inverse correlation. Should there have been any correlation between exports and exchange, it was not inverse as the " law " suggests, but direct.

We encounter the statistical reality, namely, that the higher Rupee was actually a stimulus to export or rather that the period of high exchange coincided with the period of increased exports. And we have to admit that the demand for India's goods abroad

2 *Cours d'Economie Politique*, Vol. II (Paris 1934), p. 131.

is not determined, if at all, exclusively by the rate of exchange. There are other and more weighty circumstances influencing the volume and price-movements of export-goods, which need not be gone into for the time being.

The paradoxical situation, namely, that even a higher exchange may be accompanied by the stimulation of exports is somewhat comparable to an important fact pointed out by Nogaro in *La Monnaie et les phénomènes monétaires contemporaines* (Paris 1935).[3] Contrary to the expectations of the quantitative theory of money, says he, an increase in the volume of money in circulation may act as a stimulant to production and this increase in production *provoque une baisse des prix* (leads to a fall in prices). Instead of raising prices, the enlarged monetary circulation may thus be the cause of their fall.

The Eighteen-penny Rupee and Stimulus to Exports (1927—29).

Let us examine the situation in another economic conjuncture.

The eighteen-penny Rupee was introduced in July 1927 in the place of the " popular " sixteen-penny Rupee. As a result of this measure the Indian cultivators' goods were not sold abroad in relatively less quantities than before. An analysis of the export figures of 1927—29 indicates rather that the exports increased in jute, cotton as well as tea. Besides, the export of those oil-seeds for which the demand in foreign countries is old and regular also showed some increase. During this period, then, also the correlation between exports and exchange was not inverse but direct.

The eighteen-penny ratio had been the *de facto* rate since September 1924.[4] The regime of higher exchange had lasted five years when in September 1929 the crisis overtook the world-economy.

During this entire period the average monthly exchange was invariably above 18d. The annual averages were as follows:

1925	...	...	18·14/32d.
1926	...	...	18·8/32d.
1927	...	...	18·9/32d.
1928	...	...	18·11/32d.
1929	...	...	18·11/32d.

3 L. Baudin : *La Monnaie et La Formation des Prix*, Vol. I (Paris 1936), pp. 478-479.

4 *Statistical Abstract for British India* 1920—30 (Calcutta 1932), pp. 316-17.

The behaviour of exports as well as prices under the "new Rupee" may be examined in connection with raw cotton as well as raw jute. And for this it should be appropriate to study the curves previous to the world-economic depression. We find that in the *milieu* of the eighteen-penny Rupee, *i.e.*, in the conditions of the so-called higher exchange the exports behaved quite favourably. The following table will exhibit the average figures for raw cotton[5] in three periods, (1) pre-war, (2) 1927-28, *i.e.*, the first year of the new Rupee, and (3) 1928-29, the last pre-depression year:

	Bales Exported (400 lbs. each)	Total value Rs.	Price per cwt. Rs.
1. Pre-war	2,407,000	333,000,000	38-11-0
2. 1927-28	2,686,000	477,000,000	49-11-11
3. 1928-29	3,712,000	662,000,000	49-15-7

All the three curves for raw cotton,—*quantum*, value and price,—rose during that period. The three jute-curves of those days also told the same story of rise, thus:[6]

	Bales exported (400 lbs. each)	Total value Rs.	Price per ton Rs.
1. Pre-war	4,281,000	222,000,000	290
2. 1927-28	4,995,000	306,000,000	342
3. 1928-29	5,028,000	323,000,000	360

Both in jute as well as cotton, higher exchange (18d.) went hand in hand with (1) higher exports in *quantum* and value as well as with (2) higher price per unit. No matter what be the theory, the facts of trade statistics demonstrate that both export and price curves moved in India's favour even under conditions of higher exchange.

It is of course patent on deductive grounds that the higher exchange ought to raise the prices of exports. The rise of prices, therefore, as demonstrated by statistics is quite in keeping with the demands of speculative economics. But the rise in the *quantum* of exports is at variance with *a priori* reasoning.

The index number of the prices of 28 exported articles repeats the same story of rise, as follows:[7]

1873 ...	100	1927 ...	209
1911 ...	136	1928 ...	212
1913 ...	154	1929 ...	216

5 *Review of the Trade of India in* 1928-29 (Calcutta 1929), pp. 72, 161, 207, 225.
6 *Ibid.*, pp. 161, 205, 225.
7 *Statistical Abstract for British India* 1920—30 (Calcutta 1932), p. 722.

The reactions of Indian prices as well as exports to currency are then clear. From 1927 to 1929 during the period of the statutory eighteen-penny Rupee under pre-depression conditions exports rose as well as prices in comparison to pre-war conditions.

The World-Economic Depression and the New Rupee (1929—32).

The diminution of exports was a universal phenomenon during the world-economic depression (1929—32). It may then be treated as having been in the main indifferent to exchange considerations, high or low. The impact of the "new Rupee," therefore, may be left out of the consideration.

At 1932 the percentage decline in exports since 1929 may be seen for certain countries as below:[8]

A

	Countries	Per cent		Countries	Per cent
1.	Denmark	53	3.	Netherlands	57
	Relgium	53		Italy	57
2.	Australia	55	4.	New Zealand ...	58
	Finland	55		Germany	58

B

5.	Irish Free State ...	60		Sweden	64
	Japan	60		United Kingdom ...	64
	Canada	60		Czechoslovakia ...	64
6.	Brazil	61		Argentine	64
	Greece	61	10.	Mexico	65
	France	60		Spain	65
7.	Poland	62	11.	Peru	67
8.	Switzerland	63	12.	Hungary	68
9.	Jugoslavia	64	13.	U.S.A.	69
	Egypt	64	14.	India	70

C

15.	Austria	71	16.	China	75
	Uruguay	71		British Malaya ...	75
			17.	Chile	84

8 *World Economic Survey* 1932-33 (Geneva 1933), p. 214.

Nearly three dozen countries sustained a decline in exports exceeding 50 per cent in the course of four years. In five countries, namely, Chile, British Malaya, China, Uruguay and Austria the decline was heavier than in India and ranged between 71 and 84 per cent. India's position which is measured by a decline of 70 per cent was almost identical with that of the U.S.A. (69 per cent) and Hungary (68 per cent). Six countries, namely, Argentine, Czechoslovakia, U.K., Sweden, Egypt and Jugoslavia each with a decline of 64 per cent, happened to be just a few points ahead of India. Nay, all those countries which are marked by a decline down to 60 per cent, namely, Irish Free State (60 per cent), Japan (60 per cent), Canada (60 per cent), Brazil (61 per cent), France (61 per cent), Poland (62 per cent), and Switzerland (63 per cent) might be described as belonging almost to the same fraternity of adversity as Hungary, U.S.A., India and Austria.

All the same, it is worth while to observe that the trade balance of India was improving, as will be evident in the following statement of export surplus from April 1930 to September 1933:[9]

		Exports Rs.	Imports Rs.	Export-Surplus Rs.
1930	April-Sept. (slack season)	1,251,300,000	874,100,000	+377,200,000
1930-31	Oct.-March (busy season)	1,005,100,000	774,100,000	+231,000,000
1931	April-Sept. (slack season)	780,100.000	663,500,090	+116,600,000
1931-32	Oct.-March (busy season)	825,300,000	600,200,000	+255,100,000
1932	April-Sept. (slack season)	621,900,000	709,000,000	− 87,100,000
1932-33	Oct.-March (busy season)	734,400,000	616,800,000	+177,600,000
1933	April-Sept.· (slack season)	726,900,000	554,800,000	+172,100,000

The trade balance of the slack season (April-September 1933) was larger than that of the preceding busy season (1932-33, October-March). The improvement should appear to be remarkable in view of the fact that the corresponding slack season of 1932 was marked by a negative figure, imports exceeding exports.

9 Based on *Accounts Relating to the Sea-borne Trade and Navigation of British India* (Delhi) for September 1932 and 1933. See *Indian Finance* (Calcutta) for November 18, 1933 and December 9, 1933.

That half-year represented indeed the *nadir* of depression in the Indian economy. As it is, the figure for April-September 1933 (Rs. 172,100,000) is considerably above that of the corresponding season of two years ago (Rs. 116,000,000).

The regime of the new Rupee, then, was relatively speaking quite favourable even during the period of the world-economic depression. In other words, the correlation continued to be direct.

India's Exports from April to August 1936.

During the last decade (1927—36) the Rupee-Sterling ratio has not undergone any statutory modification. This is the decade of the eighteen-penny Rupee. But bazar-fluctuations there have been. Let us exhibit these fluctuations for the five months of 1936 (April to August) in the background of the average rates for 1926—28. We get the following table:[10]

Months	Average for 1926 to 1928 (1)	1936 (2)	% Change (+ or −) of (2) over (1)
April	17·28/32d. per Re.	18·3/32d.	+1
May	17·29/32 „	18·3/32d.	+1
June	17·29/32 „	18·3/32d.	+1
July	17·28/32 „	18·3/32d.	+1
August	17·29/32 „	18·3/22d.	+1

Comparative exchange statistics indicate a positive value for all months. In 1936 the Rupee was invariably "higher" than during 1926—28 by one per cent.

We shall now examine at random the export-biography of a few Indian commodities with reference to this the most recent date (April-August 1936).

The behaviour of raw jute in the export world during the five months April to August can be seen in the following table for 1936 in the perspective of that for 1926—28:[11]

Months	Average for 1926 to 1928 (1)	1936 (2)	% Change (+ or −) of (2) over (1)
April	48,307 t	49,699 t	+3
May	40,647 t	52,290 t	+29
June	38,240 t	55,794 t	+46
July	32,690 t	53,874	+65
August	39,983 t	30,542	−24

10 *Monthly Survey of Business Conditions in India* August 1936 (Delhi 1936), p. 286.

11 *Monthly Survey* etc., p. 270.

In August 1936 there was a decline compared to the situation in August 1926—28. But during the other months there was an increase.

For raw cotton the comparison in export-behaviour between the two years 1936 and 1926—28 is recorded below:[12]

Months	Average for 1926 to 1928 (1)	1936 (2)	% Change (+ or −) of (2) over (1)
April	55,663 t	86,513 t	+54
May	51,705 t	71,173 t	+38
June	49,126 t	55,070 t	+12
July	41,864 t	52,600 t	+26
August	37,254 t	30,176 t	−19

In this instance also August 1936 marked a decline *vis-à-vis* August 1926—28. But otherwise the story was positive.

In regard to hides and skins (tanned or dressed) comparative export-statistics yield the following figures:[13]

Months	Average for 1926 to 1928 (1)	1937 (2)	% Change (+ or −) of (2) over (1)
April	1,656 t	2,091 t	+26
May	1,694 t	1,895 t	+12
June	1,548 t	2,066 t	+33
July	2,147 t	2,044 t	− 5
August	1,995 t	2,396 t	+20

In 1936 the exports for July were somewhat less than those in 1926—28. But during the other months they were more.

The export-story exhibited by lac in 1936 (April-August) is shown below in the perspective of that in 1926—28:[14]

Months	Average for 1926 to 1928 (1) cwts.	1936 (2) cwts.	% Change (+ or −) of (2) over (1)
April	40,000	49,000	+22
May	54,000	58,000	+ 7
June	64,000	65,000	+ 1
July	55,000	58,000	+ 5
August	54,000	50,000	− 7

12 *Monthly Survey* etc., p. 271.
13 *Monthly Survey* etc., p. 273.
14 *Monthly Survey* etc., p. 274.

With the exception of August when the percentage in relation to 1926—28 was negative the other months in question for 1936 gave positive results.

We may take the whole-year views of the export-world for the depression and post-depression years. The behaviour of raw cotton, jute manufactures, raw jute and pig-iron during the seven years (1929—36) is exhibited below:[15]

Years		Raw Cotton in bales of 400 lbs.	Jute Manufactures (including twisted yarns) in tons	Raw Jute in tons	Pig-iron in tons
1929-30	...	4,070,500	957,955	806,900	568,800
1930-31	...	3,926,100	766,649	619,600	439,100
1931-32	...	2,369,300	663,618	586,600	350,900
1932-33	...	2,062,800	679,745	563,100	218,300
1933-34	...	2,820,800	672,155	748,200	377,500
1934-35	...	3,490,300	684,718	752,400	417,100
1935-86	...	3,396,100	752,391	771,300	538,200

It was during the regime of the eighteen-penny Rupee that the *nadir* was touched by the exports of raw cotton, raw jute and pig-iron in 1932-33, and by that of jute manufactures in 1931-32. It was also the same regime of exchange which saw the recovery in the export-trade of those commodities,—after 1931-32 in the case of jute manufactures and after 1932-33 in the case of others.

It is possible to quote commodities whose export-biography is different from the facts placed here. Indeed, even the commodities described here exhibited months, as we have noticed, during which the results were negative.

It is not necessary to go into the export-biography of all the months of the year, nay, into the statistics of all the years. The student of statistics is already forced into an atmosphere where an invariable correlation of a particular type between exchange and export is the farthest removed from the economic reality. Even a higher exchange may run *pari passu* with intensified or higher exports. In other words, the correlation may be direct, instead of being inverse. Should the investigation be carried on in regard to the leading foreign countries such as receive India's exports the result would not fail to be more or less similar.

The impact of "other circumstances," *i.e.*, non-exchange factors in the economic *Gestalt* or form-totality of economic enterprises on the *quantum* and value of exports would continue to be a dominant consideration. In the study of economic

15 *Monthly Survey* etc., pp. 297, 300, 302, 305.

causation, then, exchange-monism like many other monisms in economics or other sciences is found to be wanting. The relativity of currency-economics is to be pronounced as a sound doctrine both for economic theory and economic statesmanship.

The Ottawa Agreement as a Non-Exchange Factor (1933—36).

Among the non-currency or non-exchange factors of the recent economic conjuncture is to be noticed the Ottawa Agreement of December 1932.

The total exports rose from 132,4 crore Rupees in 1932-33 to 151,2 crore Rupees in 1934-35. The total imports remained almost the same coming down slightly from 132,5 crores to 132,2 crores.[16]

In 1932-33 India sold to Japan, Germany and the U.S.A. 24·3 per cent of her foreign exports. In 1934-35 the percentage rose to 28·8 per cent. In monetary value India's exports to these countries were worth 32,4 crore Rupees in 1932-33. But in 1934-35 the value rose to 44,7 crore Rupees. During the Ottawa period India has not lost her non-Empire markets. From the total of 54·6 the percentage has come down to 54·1 only. In other words, there has been no perceptible retaliation from the foreign countries.

In 1932-33 India imported from Japan, Germany and the U.S.A. 31·7 per cent of all her foreign requirements. In 1934-35 the percentage came down to 29·7. In monetary value, however, India bought 42,2 crore Rupees worth in 1932-33 from these countries. But in 1934-35 the purchase rose to 47,3 crore Rupees. Individually speaking, both Japan and Germany have maintained their position on the Indian market. Germany lost only 0·2 per cent while Japan gained 0·3 per cent. The Indian market is still open to non-Empire suppliers. The total reduction sustained by all foreign countries combined is 4·6 per cent (from 55·2 to 50·6 per cent). It may be pointed out *en passant* that it is this relative reduction that was one of the objectives of the Imperial Preference.

India's imports from the United Kingdom rose from 36·8 per cent in 1932-33 to 40·6 per cent in 1934-35. This points but to the realization of the same objective.

During the same period India's exports to the United Kingdom rose from 28·0 per cent to 31·6 per cent. This

16 *Review of the Trade of India in 1934-35* (Delhi 1935), pp. 181, 200, 201 (Tables 5, 9, and 10). See also the *Review* 1933-34 (the corresponding tables).

percentage is higher than the pre-war, war and post-war averages. The expansion of India's exports to the United Kingdom has been consummated, be it observed, without detriment to her exports to the non-Empire countries.

The Place of Inverse Correlation in India's Export-Behaviour (1931—36).

Finally, it is important to observe that the "new Rupee" was not always "high" from 1927 to 1936 in relation to *all* the currencies of the world.

In September 1931 the U.K.'s getting off the gold standard was tantamount to the depreciation or devaluation of the British currency, namely, Sterling, in terms of the gold-standard currency. The linking of the Indian currency to the British implied (1) that the ratio of the Rupee to Sterling remained unchanged, *i.e.*, what it had been since 1927, but (2) that the Re. was devalued, *i.e.*, depreciated to the same extent as the £ in terms of the dollar, the Reichsmark, the yen, the franc and other gold-standard currency units.

While analysing the relative expansion of exports during and since the depression of 1929—32 due value has to be attached to these devaluations. It is in the *milieu* of this fall of the £ st. and of the Rupee that the industrial goods produced by the British manufacturers and the agricultural produce of the Indian cultivators were exported to foreign countries, it is to be noted, in relatively larger amounts, of course, *within the limitations* of the world-depression.

The foreign countries, however, did not remain indifferent to the devaluations of the Sterling bloc. Most of the countries followed suit as exhibited below for October 1933 in three groups:[17]

I. Gold-parity 65—80 per cent, *i.e.*, currency-depreciation 20—35 per cent.

Countries	Gold Parity %	Countries	Gold Parity %
Austria ...	77·95	Egypt ...	65·09
Jugoslavia ...	76·97	United Kingdom	65·09
Hungary ...	76·36	Ireland ...	65·09
Portugal ...	68·20	Esthonia ...	65·06
U.S.A. ...	66·45	India ...	65·05
Canada ...	65·43		

[17] *Währungsübersichten Oktober* 1933 (Deutsche Bank Berlin); *World Economic Survey* 1932-33 (Geneva 1933), pp. 222-223; *Review of World-Trade* 1932 (Geneva 1933), p. 30; *Federal Reserve Bulletin* (Washington, D. C.), June 1936, pp. 429-30 (Annual Report of the Bank for International Settlements 1935-36).

II. Gold-parity 50—65 per cent, *i.e.*, currency-depreciation 35—50 per cent.

Countries		Gold Parity %	Countries		Gold Parity %
Sweden	—	61·11	Finland	...	55·54
Argentine	...	59·90	Denmark	...	52·48
Norway	...	59·50			

III. Gold-parity 35—50 per cent, *i.e.*, currency-depreciation 50—65 per cent.

Countries		Gold Parity %	Countries		Gold Parity %
Colombia	...	48·30	Spain	...	43·39
Brazil	...	46·18	Japan	...	36·28
Greece	...	44·08			

The devaluation of the Rupee was equal in amount to that of the Pound. But in regard to the other currencies (extra-British) these devaluations (gold-parity 65 per cent) were only nominal or relative, effectively counteracted as they were by larger or smaller doses of depreciation instituted by the different countries (from Sweden with 61 per cent gold-parity down to Japan with 38 per cent). Competition in devaluations between country and country was so keen as to prevent virtually every country from enjoying any effective devaluation.

In any case the stimulation to or increase of exports from India after September 1931 may have to be attributed in part at any rate to this relative devaluation or lower exchange. To this extent the correlation between exports and exchange was inverse as the law should lead us to expect. In India's export-behaviour, then, the place of inverse correlation cannot be altogether ruled out as out of the question.

The devaluations of October 1936 in Europe are to be recognized as constituting some more factors affecting or counteracting the relative devaluations of the Sterling bloc. It should be observed, however, that, elastic as they happen to be, they range as a rule between 25 and 35 per cent.[18] The extent of devaluation, *e.g.*, of the French and Swiss francs is not greater than that of the Pound sterling and the Rupee as indicated in the tables.

18 *Midland Bank Monthly* (London), October-November 1936 (Is the World Nearer the Gold Standard?), pp. 1-2. See also the *New Monetary System of the United States* (National Industrial Conference Board, New York 1934), pp. 95, 103 and *Federal Reserve Bulletin* (November 1936), pp. 878—881.

Leaving the phenomena of the last few weeks out of the picture we may then formulate the proposition that, in the first place, exports cannot be interpreted as but *functions* of exchange-rates alone. Tariff, quota, barter or compensation business, clearing agreements, strategic alliances, industrial "autarchy," credit insurance, and many other items in economic planning constitute the non-exchange factors to which also the exports react in a functional manner. And secondly, the correlation between exchange and exports, in so far as it is a reality, is not all inverse. There is a great deal of direct correlation to be emphasized in the analysis of export-behaviour.

THE THEORY OF EMPLOYMENT AND INDUSTRIAL DEPRESSION

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Industrial fluctuations manifest themselves in what may conveniently be called states of over- and under-production. In times of upward movement the economy is characterised by a state of under-production, while in those of downward movement it is characterised by a state of over-production. Thus, in a period of "Boom" production appears to lag behind consumption and prices show an upward trend, while in a period of "depression" production seems to be in excess of consumption and prices show, consequently, a downward tendency.[1]

When we view fluctuations in the light of such states of over- and under-production it becomes necessary to consider the precise meaning of over- or under-production. It has frequently been argued that while it is possible for one or a few industries to be in a state of over-production, it is impossible for all industries to be simultaneously in such a state. General over-production, in other words, has been regarded as an impossibility. As against this view it has been observed that while it may be absurd to talk of over-production in all industries in case of barter or non-monetary economy, it is certainly possible to conceive of a state of general over-production in money-economy.[2]

1 This does not mean, as is shown later in the text, that stability of the price-level is a condition for industrial equilibrium. The tendency to such fluctuations in the price-level is often concealed by tendencies on the side of money working in the opposite direction. Pigou writes, (*Industrial Fluctuations*, p. 31) "booms are characterised by the *production of goods in excess of the current rate of consumption, with consequent accumulation of stock*, and depressions by *curtailment of production below current consumption, with consequent depletion of stocks.*" Words in italics are quoted from *The Problem of Business Forecasting* by Persons, Harly and others.

2 The difference between money and barter economy does not consist in the fact that the one uses a medium of exchange whereas the other does not. Most of the theories that call to their aid the difference between money and barter economy fail to understand the essential characteristics of barter economy. Rosenstein-Roden (*The Co-ordination of the General Theories of Money and Price*, Economica, August, 1936) believes that the economy that uses more than two goods possesses the essential characteristics of money-economy. Adarkar (*The Theory of Monetary Policy*) is of the opinion that comparison of money with barter economy cannot help us in analysing the causes of industrial fluctuations.

For, since over-production is a comparative term, over-production in one industry must necessarily signify a state of under-production in some other industries. Hence, no sensible meaning can be attached to the term general or all-round over-production if we are considering the case of barter economy. But in the case of money-economy such a term assumes intelligent meaning. For, general over-production would there mean over-production of all *commodities* as compared to under-production of *money*. We can thus find a genuine case of general over-production in our modern monetary economy.

Industrial fluctuations then, if they manifest themselves in states of over- and under-production, also naturally manifest themselves in states of shortage or abundance of money. Whatever the causes of such restricted or abundant supplies of money may be, a shortage of money signifies a comparative increase of demand for money, while abundance of it signifies a comparative decrease of demand for it. If money be identified with a medium of exchange, so that it is understood as a thing that is in *circulation* and has a positive velocity, the demand for it could be considered in the light of demand for investment[3] (assuming, however, that money is borrowed only for purposes of investment). Supply can similarly be identified with that part of money stock which is not spent and is available for lending. In other words, then, industrial instability can be viewed in the light of a lack of balance between saving and investment. This is the view that is now held by most leading economists.[4] Keynes in his recent book has, however, defined

3 The word money is capable of various interpretations and, consequently, "demand for money" may signify, besides what has been indicated in the text, a demand for liquidity. But the money that possesses cent per cent liquidity has no velocity of circulation and therefore, in one sense, is not money at all. The important point involved here is whether money is a medium of exchange or a store of value, meant to satisfy the want of security.

4 Keynes, Hayek, Robertson, Mises, Lindahl, Myrdal, Spiethoff, Fanno, Ropke, Moulton, Hobson, Adarkar, Durbin and others make their theories rest on the pivot of saving investment equilibrium. But there is still a considerable difference of opinion as to the precise manner in which saving and investment get out of equilibrium. For Keynes and Hobson, for instance, the cause of the trouble lies in the excess of saving (at least to start with), while for Spiethoff it lies in the shortage of saving. There is further disagreement in regard to the meanings of the terms saving and investment. The present writer finds Adarkar's conception of the balance between saving and investment perhaps the most satisfactory.

For Meade equilibrium consists in the constancy of Final Income which however is so defined as to make saving-investment parity a necessary condition for it.

saving and investment in such a way as to make them necessarily and always equal to each other and, consequently, he seeks to find the cause of unemployment in the deficiency of *effective demand.*[5] As a matter of fact, deficiency of effective demand is caused by hoarding and, therefore, by a lack of proper balance between saving and investment as commonly understood.[6]

Saving and investment get out of balance when a portion of income is hoarded, that is, when it is neither spent nor lent out but kept idle as a cash balance. Of course, the practice of hoarding on a moderate scale in this sense is natural. Had it not been necessary for us thus to hoard any part of our income production would have been correspondingly larger and probably along with it welfare too. Hoarding signifies, along with other things, the locking up of certain resources of the community. Since income under normal conditions is cost, unless the whole of it is spent (or invested) the cost incurred by the economic system is not fully recovered. Hoarding causes a loss to producers, and through them eventually to consumers. However, a fixed amount of hoarding is quite consistent with stationary economic conditions and an economy that somehow adjusts itself to circumstances created by constant hoarding may not suffer any more from such a hoarding.[7] In that case, in fact, hoarding

Pigou in his *Industrial Fluctuations* does not touch this point of saving-investment parity; but nevertheless he recognises the importance of a policy that does not interfere with the natural flow of capital into industry. He writes, (p. 252) " The monetary and banking influences which at present augment the range of industrial fluctuations will be eliminated if both the banks refrained from interference by way of forced levies with the normal flow of new capital to industry . . . ."

5 Mr. Hobson also recognises the important part that deficiency of effective demand plays in causing industrial depression. As a matter of fact, discrepancy between saving and investment must necessarily manifest itself in deficiency or excess of effective demand.

6 Hensen's comment on this terminology are " Keynes, refusing to adopt this terminology, is hard put to it to find a satisfactory scheme of exposition. One is never clear precisely what his terminology means . . . . In terms of real phenomena, obviously saving must always equal investment, but in terms of the receipt and disposition of money funds, such a terminology makes it very difficult to handle satisfactorily the important concepts of hoarding and dishoarding, credit creation and debt concellation." (Mr. Keynes on Underemployment Equilibrium, *The Journal of Political Economy.*)

7 In the long run, the economic system can adjust itself to circumstances created by the practice of hoarding a constant amount. As a result of such an adjustment the general level of prices would be lower. But it is difficult for the economic system thus to adjust itself in the period which circumstances allow it.

cannot be said to be currently being practised. The true cause of *fluctuations* consists, therefore, not in the fact of hoarding itself, but in the fluctuations of hoarding. For, it is a change in the volume of hoarding that is responsible for disequilibrium between saving and investment. With an increase of income, other things being the same, (the propensity to consume and liquidity preference remaining undisturbed) hoarding or cash balance increases and saving and investment tend to get out of equilibrium.

Mr. Robertson's definition of hoarding differs from the usual definition of the term. He defines a person as hoarding when he takes step to raise the proportion existing between his money-stock and disposable income.[8] Some economists, as Keynes and Hawtrey do not favour this new definition of hoarding. To the present writer it seems that, while Mr. Robertson's definition has some valuable features, it does not fit in well with the theory of industrial fluctuations that seeks in some way or other to find the cause of disturbances in the disparity between saving and investment.[9]

When saving increases, due to the increase of income, it does not automatically find its way into investments, though the mechanism of the rate of interest does help it, to a certain extent, to find that way.[10] For, as Mr. Keynes argues, the volume of

For, such an adjustment necessitates reduction of the prices of finished goods, fall of wages, fall of interest, reduction of the hours of work, etc.—changes which are difficult to effect in the absence of flexibility of our economic system. Hence it is hardly possible to reach a position of equilibrium before fresh changes in the system shift the point of equilibrium away form its previous position; or it might be possible to reach it, as Prof. Keynes says, by less economic ways, *i.e.*, with a large percentage of the population unemployed.

8 Saving and Hoarding, *Economic Journal*, September, 1937. Barger defines the term in a similar manner. "In truth a person performs an act of hoarding or dishoarding according as he allows the ratio of his cost balance to his turn-over to increase or decrease." (Neutral Money and the Trade Cycle, *Economica*, November 1935).

9 Equilibrium of saving and investment necessarily implies the absence of fluctuations in the rate of hoarding. The meaning of the word hoarding must, however, offer some difficulty. But it is possible so to define hoarding as to make the balance between saving and investment a condition for its absence. The idea that industrial stability requires absence of hoarding is implied in the works of more or less all trade cycle theorists, but we find it in explicit form in the works of such economists as Robertson, Barger and Koopman.

10 It is now generally recognised that though the rate of interest can easily check investments it is comparatively ineffective in encouraging them. Prof. Robbins has thus been criticised, for having regarded the rate of interest as an active agent in bringing about equilibrium.

saving is determined by income (propensity to consume remaining undisturbed) while investment is induced by the marginal efficiency of capital, and there is no natural force that necessarily harmonises the two.[11] In other words, equilibrium is preserved only when the increase of income is distributed between spending and saving in a unique way. The rate of interest is not powerful enough a force to bring about this the only equilibrium-distribution of increased income. An inappropriate distribution in the beginning generates forces that instead of correcting further upset the distribution and it is only after a time that forces begin to turn in the other direction.

There are about as many theories of the trade cycle as there are writers. But it seems to the present writer that the differences between most of them are not of a fundamental nature, being generally confined to details of exposition and the particular angle from which industrial disturbances or depressions are examined. If we agree that one satisfactory way of looking at fluctuations is to view them in the light of disequilibrium between saving and investment (which in a way is the same thing as inequality between *natural* or *normal* rate of interest and the money rate of interest)[12] or fluctuations in hoarding, the next step we have to take is to seek the causes of such a disequilibrium between saving and investment. Assuming that the propensity to consume and the innate preference for liquidity do not change independently, except perhaps in a very long period, for the more ultimate causes of fluctuations we have to look to changes in the income of the people. The effects of changes in income

Professor Bye still believes in the classical theory that the rate of interest automatically regulates the supply of saving and the demand for capital. (The Process of Capital Formation and its Relation to Inequality, *The American Economic Review*, December 1936.)

11 This view is now held by most of the leading writers on Trade Cycle theory. Mill argued, consistantly with the teachings of classical economics, that investment always followed upon saving, but he too was careful to observe that disturbances can be caused by too rapid accumulation of savings for which it becomes difficult to find a profitable investment.

12 Though the rate of interest may not be a strong enough force to bring the dislocated economic system back into a state of equilibrium, yet the rate that prevails when the system is in a position of equilibrium and does not tend to get out of that position, must be looked upon as a natural or ideal rate. Various names have been given to such a rate of interest, *e.g.*, equilibrium rate (Dr. Hayek), normal rate (Wicksell), True rate (Cassel), natural rate (Keynes) and Ideal rate (Adarkar). Yet there is a great divergence of opinion as to what this rate of interest is exactly equal to. For a stimulating and critical study of these rates see, Adarkar, *The Theory of Monetary Policy*.

would be comparatively less pronounced were all incomes to increase in the same proportion. But since, in the short period, some incomes are variable and other not, changes leading to a rise of income do not affect all incomes equally. The first effect, favourable or unfavourable, on incomes is on the earnings of entrepreneurs. When, therefore, incomes change a redistribution of wealth also takes place. We may therefore be reasonably correct in assuming that the equilibrium between saving and investment is upset principally because a redistribution of the community's wealth takes place.

Among the causes of such a redistribution we have inventions, leading to changes in the technique of production, changes in tastes of people, causing shifts of demand from one commodity to another, changes in foreign demands for a country's products, fluctuations in agricultural harvests and errors of optimism and pessimism as the most important ones. These are primarily non-monetary in their nature.[13] On the other hand, we have monetary causes which redistribute income even in the absence of the changes just mentioned. Thus an increase or decrease of the supply of money created by banks also upsets the distribution of national dividend. For, it is impossible for the money

13 Broadly speaking, there are two schools of Trade Cycle theories—monetary and non-monetary. The former believes that non-monetary causes cannot of themselves bring about cyclic fluctuations, for, in the absence of monetary disturbances, the economic system would always exhibit a tendency to return back to a position of equilibrium. For a broad review of various trade cycle theories see Hayek's *Monetary Theory and the Trade Cycle.*

As a matter of fact, no clear-cut distinction between monetary and non-monetary causes is possible. Non-monetary causes must act on monetary factors and *vice versa*. It is difficult even to keep the monetary and non-monetary approaches to the study of trade cycle theories neatly separated. The difficulty is due to the fact that monetary and non-monetary factors act and react on each other. (Recall Adarkar's Active and Passive Aspects in this connection.) Moreover, even in a barter economy influences comparable to monetary influences that operate in money-economy would not be totally absent.

Hayek says, in a footnote (*Monetary Theory and the Trade Cycle*) " Since the publication of the German edition of this book, I have become less convinced that the difference between monetary and non-monetary explanations is the most important point of disagreement between the various Trade Cycle theories."

Rosenstein-Roden writes (The Co-ordination of the General Theories of Money and Price, *Economica*, August 1936), " The distinction between influences from the side of money and from the side of goods and the consequent separation of the monetary and non-monetary approach in economic theory is an inheritance from the classical school which is being overcome only very gradually and with great difficulty."

injected into the system by monetary authorities to get distributed at once among the various income receivers in the proportion of their income-holdings.

So far our treatment of the problem has not been made to rely directly on the equation of supply of and demand for commodities. However, it may be noted at this stage, that industrial equilibrium does require, of course, the balancing of the supply and demand of all commodities. But since the demand for commodities is somewhat uniquely related to supply of savings and the supply of goods to the demand for savings, by taking a step backwards we find that this balance is resolvable into that of supply and demand of savings (social savings as Adarkar explains it). In other words, savings must equal investment. It does not matter, it is maintained, what the absolute volume of saving is;[14] industrial stability is assured if investments are *made* to equal savings. Talking in terms of employment, the workers released by the fall of demand for consumption goods, consequent upon increased savings, would be absorbed in investment industries, if savings are turned into investments. No saving is wasted—purchasing power is not allowed to remain unutilised. In this argument there is, however, a fallacy which consists in thinking that the market rate of interest is an effective agent in bringing up investment into level with saving. For, there is, according to the stage industrial development has reached, a certain appropriate proportion between capital investment and output. Industrial stability requires that this proportion should coincide with that between saving and expenditure. But there are no forces which the change in the amount of saving automatically releases and which could be relied upon to establish this coincidence. To save more is to spend less, *i.e.*, to demand less consumption goods. To invest more is to plan the production of a larger quantity of consumption goods and also to create an additional demand for them through providing more employment. What is the guarantee that these changes in various directions will balance one another?

14 It is generally supposed that the absolute volume of saving does not matter. As is shown in the following pages, there is a way in which the absolute volume of savings can become the cause of disturbances. Wilhelm Ropke (Socialism, Planning and the Business Cycle, *The Journal of Political Economy*, June, 1936) says, " The theory of crises and cycles which I prefer may be conveniently labelled as monetary over-investment theory . . . . in my analysis it is not the rise of the rate of investment relative to the rise of saving which is the real cause of instability, but the absolute rise of investment, no matter whether financed by voluntary or by forced saving."

In short, it is impossible for every increase of saving to be profitably absorbed by new investments. The market rate of interest, therefore, cannot prove effective in pushing up investments into level with savings.[15] For, what is necessary to bring the system back into a position of equilibrium is that the market rate of interest should be capable of affecting, on the one hand, the amount of saving and, on the other, investment.[16] It is unable, however, to do either. Specially, the supply of saving is little affected, at times, by changes in the rate of interest ; and there lies the root cause of disturbances—hindrances in the way of forces that could otherwise be relied upon to bring the system back into a position of equilibrium.

Although, therefore, we can say that in a state of equilibrium saving equals investment, it is not possible to maintain that a rate of saving that equates investment to saving would necessarily succeed in re-establishing equilibrium. For when consumption is at its low ebb and savings are, therefore, abnormally high, the policy that pushes up investment to balance the savings would cause a larger stock of final goods to be produced than the low level of consumption could absorb. The cause of disequilibrium would thus remain and get strengthened by the policy that aimed at bringing about equilibrium between saving and investment. This might appear as a paradoxical statement. But we should note that increased saving unless it is deliberately practised to

15 It will be readily understood, if the exposition of the text is clear enough, that the manipulation of the rate of interest can but achieve little when it has to face an economic system that has gone hopelessly out of balance. This fact has not remained unnoticed by Trade Cycle theorists. Hayek (*Monetary Theory and the Trade Cycle*, p. 188) writes, " . . . . for it implies that no measure which can be conceived in practice would be able entirely to suppress these fluctuations." Adarkar (*The Theory of Monetary Policy*, p. 108) is, therefore, perfectly justified in his belief " that the concept of the natural rate, which is only appropriate to the theory of moving equilibrium, cannot be extended to that of a disequilibrant economy."

Robertson holds the same view.

16 The classical theory that the rate of interest equalises the supply and demand of saving or equates savings to investment is not applicable to the modern progressive capitalistic economy. All economists are now agreed on the point that the rate of interest has very little influence in increasing the demand for capital in times of falling prices. Hawtrey (*Economic Journal*, 1922, p. 299) expresses the idea very well when he says, " Even lending money without interest would not help if borrowers anticipated a loss on every conceivable use that they could make of the money."

Pigou writes, (*Industrial Fluctuations*, p. 267) " People do not want to borrow on any terms and the banks cannot force them to do so."

make possible increased consumption in the future (and this may, under normal conditions, be the rational aim of increased saving) signifies a desire to consume less and, therefore, calls for a more or less proportionately decreased volume of investment. Under such conditions equilibrium can be established by allowing savings to remain idle: and in the new position of equilibrium thus established there would be a smaller volume of investment, a smaller output of consumption goods, a lower standard of living and probably, though not necessarily, a greater percentage of unemployment. (If hours of work could be reduced evenly and equitably, equilibrium would be established without sacrifice of employment. In other words, we would have underemployment instead of unemployment).

The only way of establishing equilibrium by equating investment and saving would be by allowing the structure of production to get suitably adjusted to changed conditions. Increased volume of investment, consequent upon increased saving, should not be allowed to increase the output of consumption goods; for, as already shown, the supply of such goods would otherwise exceed the demand. But the only way in which we can conceive of a larger volume of investment associated with a smaller output of final goods is by allowing our mind first to conceive of a changed structure of production. As Dr. Hayek has so ably shown the lengthening of the structure of production can absorb a larger percentage of saving.[17] Those who criticise Dr. Hayek fail to grasp this fundamental fact. In the normal course of time the lengthening of the structure of production is accompanied by increased productive efficiency and, consequently, a larger output of final goods. But the lengthening of the structure of production that we here envisage is not of this historical type. A lengthened out structure here represents a productive system that is more complicated or rather more roundabout, and more costly. It signifies a state of affairs in which people save more

[17] It seems to the present writer that Dr. Hayek's theory in terms of the structure of production has been very much misunderstood. The crucial point in the theory is that if increased saving is to be absorbed by investment industries without causing consumption goods to increase, the structure of production must get lengthened. Such a lengthened out structure of production is less economical, not more. It is the failure to understand this point that is responsible for the criticism of Hayek's theory, based on the size of the structure of production.

That excessive saving can be absorbed when the structure of production gets lengthened is also recognised by Hawtrey. He uses the expression "deepening process" to characterise a more capitalistic system of production.

because more (not less) investment has become necessary to turn out the same (or a smaller) quantity of goods. The implications of the state of equilibrium thus established would be a smaller output of goods and a lower standard of living. But the stability thus secured would have an advantage, namely, that it would provide fuller employment than the state of equilibrium that could be established by allowing increased saving to remain idle.[18]

Often in the study of the problem of trade cycles barter economy is assumed to be a mode of economic life that is free from all those disturbing influences which the use of money exerts on the equilibrating mechanism of economic forces. Thus, it is argued that in barter economy there would be no discrepancy between saving and investment,[19] for savings, in the manner in which they are accumulated in money-economy, would be unthinkable in a barter economy, and, therefore, the amount of saving would be automatically regulated by the needs of investment. Again, it is maintained that the rate of interest proper to such a barter economy would be the ideal or natural rate of interest, so that there would be no (monetary) factor whose operation would throw the economic machinery out of gear.

All such theories commit the fundamental mistake of supposing that barter economy differs radically from money-economy in not having in use anything comparable to money. As a matter of fact, even in a barter economy there always exists a substitute for money. Money in a barter economy may be, and of course must be, less universally acceptable, so that its currency is restricted to a smaller economic field. As a consequence of it a barter

18 To the present writer it appears that Mr. Keynes gives evidence of holding substantially the same view when, while criticising Mr. Robertson's advocacy of nipping the bloom in the bud by means of a high rate, he says, "It may be that it overlooks the social advantage which accrues from the increased consumption which attends even on investment which proves to have been totally misdirected." (*General Theory*, p. 327.)

19 Thus Wicksell identifies his natural rate of interest with that which would prevail in barter economy and Koopman says that in barter economy no one can continually sell without buying.

Barger thinks that cyclic fluctuations are not possible in barter economy to any great extent; "Acts of God and of Politicians" may, however, cause such fluctuations.

Professor Pigou maintains that the essential features of barter economy would be realised in practice if money is kept constant in value (*Industrial Fluctuations*, p. 319).

Zawadzki, in a recently published article, says that the implications of barter economy are that cash balances should remain constant.

community would have in use not one but many systems of money. Hence, barter economy would not differ fundamentally from our money-economy, inasmuch as it would have in use (a commodity or) commodities as media of exchange. Yet there is much to be gained by a comparison of money-economy with barter economy. The point of comparison is not that one system uses money whereas the other does not, but that the two systems make use of different *kinds* of money. In our modern economy money tends to be more and more a *free* and *costless* money—it has an insignificant cost of production and, therefore, no supply price. In a barter economy, money, though not absent from the scene, and though performing fundamentally the same functions, would consist of what may be termed commodity-money, having intrinsic value and a cost of production.[20] It is this difference between barter and money economy that makes all the difference in the working of economic forces. Where money has a cost of production, in the sense relevant to our purpose here, it is impossible for the economic system to let its investment exceed its saving. It is however when money can be freely created at will (*e.g.*, through means of book-credit) that the possibility of investment exceeding real saving arises. This fact has not received the recognition it deserves from those who seem to see no sense in bringing in the conception of

[20] The implication of such a money that has a cost of production is that the banks should not lend more than what is deposited with them by the people who save, or to be more correct total lending in the system should equal total saving, or again, investment should equal saving. That this is the condition for industrial stability is no new idea, of course; for this is the gist of the theory of Wicksell, Mises and Hayek among others that make use of the conception of neutral, normal or equilibrium rate of interest.

The costless (credit) money idea is expressed by Hayek and others in the words that in money economy the supply of money is elastic. Even Wicksell (*Geldzins und Guterpreise*, p. 101) writes, "The more elastic is the currency system the larger can a more or less constant difference persist between the two interest rates and the greater, therefore, will be the influence of this discrepancy on prices"—Quoted from Hayek's *Monetary Theory and the Trade Cycle*.

Similar ideas are expressed by other continental writers.

Professor Fetter (Interest Theories and Price Movements, *American Economic Review*, Vol. xvii) writes, "Throughout this process the much esteemed elasticity of bank funds is the very condition causing, or making possible, the rising prices which stimulate the so-called 'needs of business.' Truly a vicious circle, to be broken only by crisis and collapse when bank loans reach a limit and prices fall."

barter economy as an aid to the understanding of the causes of industrial fluctuations or economic depressions.[21]

21 Mr. Adarkar, it seems to me, has not done justice to this view. He is however perfectly right in maintaining that money can never be neutral in its effect on the formation of prices. If money changes in supply whether naturally and justifiably or artificially and unjustifiably, it necessarily influences the price level. If, on the other hand, it does not change, the price level may again be influenced by its failing to respond to changes on the commodity side. How should money behave in order to be neutral towards prices? The most convenient answer is that it should behave so as not to be the *cause* of movement in prices. But Adarkar as well as the critics of Wicksell (*e.g.*, Hayek) rightly maintain that a neutral money does not (and we might say, should not) guarantee stability of the price level.

Our desideratum is not or should not be stability of the general price level, but the more ultimate industrial stability. A system then in which money has a cost of production, in the sense of the text, would be industrially more stable though such a money would not be neutral towards prices if stability of the price level be considered the criterion for such neutrality.

SHOULD THE RUPEE BE DEVALUED?

BY

SUDHINDRA NATH SEN, M.A., AND HARIS CHANDRA SINHA, M.Sc., Ph.D.

The subject of current interest set down for discussion is so wide that we desire to confine ourselves to only one special aspect, *viz.*, recent exchange developments and consider whether the rupee is overvalued, and if so to what extent.

Before we do so, we should be perfectly clear in our mind about what exactly we mean by overvaluation. To fix our ideas, we should conceive of a period when the internal and external values of the rupee were in equilibrium. If during any other period, the percentage rise in the external value is greater than that in the internal value, we may conclude that the rupee is overvalued, the disparity between the two rates of increase measuring the extent of the overvaluation.

The question now arises of measuring internal and external values. Some economists such as Edgeworth are of opinion that the internal value of a country's currency is best calculated by its command over human labour. According to others, the internal value means the command over goods and services of the currency within the country. They are not agreed, however, as to whether we should consider goods and services *consumed* or goods and services *exchanged*.

The former is to be favoured on theoretical grounds. But the schedules of consumption goods and services for different communities in different parts of India are so dissimilar that it is idle to think of one common Consumption Standard for the whole of the country. Even for urban workers for whom the ways of life are more standardised, the index numbers of cost of living for different cities and different bodies of workers show great divergence. For a country so wide and heterogenous, a uniform standard is possible, if at all, on the exchange method rather than on the consumption method.

The difference between the two must be recognised, for, in India, more so than in any other country, the exchange method of weighting gives an altogether different result from the budget method of weighting. To take the case of only one commodity, jute, its importance as an object of consumption is very much less

than its importance as an object of exchange. If we define the internal value of the rupee as its command over goods and services consumed, the nearest approach to it that we can think of, is the Bombay Cost of Living Index Number. If on the other hand, we define it as the command over goods and services as objects of exchange, we may take the Calcutta Wholesale Price Index Number as an approximate measure.

In the present disordered state of currency systems there is no one external level. Roughly the world is divided into (*a*) the gold *bloc*,[1] and (*b*) the sterling area. We may therefore define the external value of the rupee (*a*) by its command over gold or, what comes to the same thing, over currency on gold; or (*b*) by its command over sterling. This holds, if and only if, gold or sterling retain the same value throughout the period of inquiry in terms of goods and services, the command over which really measures the external value of the rupee. In other words, in computing the external values, we must not take simply the franc or sterling amount that may be had in exchange for the rupee, but make appropriate adjustments for fluctuating price levels in the gold *bloc* or sterling area. Here also the question arises whether we should correct by the cost of living index number or the wholesale price index number. As explained above, the external value of the rupee is the bundle of commodities which may be had in the gold *bloc* or in the sterling area in exchange for the rupee, and not simply the command of gold currency or sterling currency over the commodities purchased by the consumers in those areas in exchange for their holding of local currencies. It follows therefore that for the purpose of correction the wholesale prices index number is to be preferred to the cost of living index number.

The greatest difficulty arises in fixing upon a basic equilibrium period. Now, so far as internal conditions are concerned, equilibrium means equilibrium between cost and prices so that only normal profit is being made by entrepreneurs, which requires that there should be no inducement for the entrepreneurs either to expand or to curtail their output in a free competitive system. But the world today is very different from such an economic system. Thus normal profit is probably another "Empty Economic Box." But in the absence of any sudden and violent disparity between cost and prices, it is reasonable to conclude that the profit earned is not abnormal. While we have a measure, not quite satisfactory perhaps, of prices, there is no

[1] The devaluation of the franc and other associated currencies has not yet brought them within the sterling area.

measure available for cost. Sir Henry Strakosch has pointed out that for England the Ministry of Labour Cost of Living Index Number is a fair measure of the cost of production. Conditions are so different that we cannot say the same thing with regard to India. We have therefore to fall back upon testing indirectly whether there is a parity between cost and prices. For instance, if we find not only that the average level of prices has been steady but also that prices have not moved *inter se*, if we find further that elements of costs such as bond rate, cost of living index (which should normally move in parity with wages) are steady, if we find in addition that trade and business activity in general have not altered materially, we shall not be wrong in concluding that the economic ship is moving on an even keel.

Considerable data have been analysed in the Statistical Laboratory, Presidency College, Calcutta, which indicate that the period of three years from April 1, 1926 to March 31, 1929, may on the whole be regarded as a period of equilibrium although the first and last portions were not entirely free from economic strain.[2] A selection from these data is given in Appendix I. In order to show the dispersion about the respective mean values, the highest and the lowest values attained in each series have also been inserted. A *caveat* is necessary here. All economic time series apart from purely random changes are subject to (*a*) trends, (*b*) cycles and (*c*) seasonal fluctuations. While the change due to the first may be ignored, and that due to the second was also not of great importance during the period under review, the last factor cannot be so neglected. For instance, trade during February containing 28 days must necessarily be less than that during January containing 31 days, whether in a period of boom or of crisis. Apart from such obvious considerations, the whole economic system of a big agricultural country like India is considerably affected by seasons. Instead of showing the maximum and minimum figures as actually recorded, a twelve-monthly moving average has been computed. For the purpose of "centring" a second moving average with every two consecutive items in this series has been calculated and shown in Appendix II, which will reveal the real state of affairs, unaffected by the seasonal fluctuations.

2 To remove this defect, the whole range of three years has been utilised in our Laboratory for the compilation of seasonal indices only, on the basis of which the middle of the period has been corrected for seasonal fluctuations to provide the base for more exact calculations.

Starting from a base period determined in this way, we proceed to consider any subsequent period, and to compute the change in the internal value. We should refer not to a point of time but to a period of time, either long or short, during which the internal price level has had sufficient time to react upon and be reacted upon by the economic system. Unless a certain level is maintained for some time, we can have only a demonstration of skipping, and can draw no valid conclusion.

The question now arises whether there is any recent period during which the exchange rate and prices are at least in temporary adjustment, although it has to be recognised that such adjustment must necessarily be less stable than during the basic period. If there is no such period even of temporary adjustment, it is useless to talk about overvaluation or undervaluation of the rupee during that period, for we have to take, as explained above, not the temporary market value, but a more permanent normal value. We have therefore to make an assumption about the mutual adjustment of exchange and prices during the recent period under consideration and see how far that assumption is justified. Some of the tests utilised for examining the stability during the three fiscal years 1926 to 1929 have been found to succeed also for the fiscal year 1935-36. It may be argued however that during the interregnum, the norm of exchange may have changed due to change in the barter term of trade. For this, the price level of exports and that of imports have to be taken into consideration. The defects of the Department of Statistic Index Numbers are much too well known to require any elaboration from us. In fact, they have been tacitly admitted to be unsatisfactory even in official publications. The new official index numbers for export and import price levels available in the "Review of Trade," calculated on the same plan as by the British Board of Trade, are much more satisfactory. But monthly data, and those for a sufficiently long period are not available. For this reason, the index number of wholesale prices in Calcutta has been split up into exports and imports as explained in *Sankhyā*, Vol. I, Part I, page 13.

The relevant figures are quoted below:—

		1926-29	1935-36
Index number of export prices	...	144	84
„ „ import prices	...	150	105
Ratio of import to export prices	...	1·00	1·25

The ratio during 1935-36 is higher than in 1926—29 for a double reason, firstly because import prices are as high as 105

through the imposition of heavy import duties, and secondly because export prices are as low as 84 through the omission from the index number of high-priced gold exported in considerable quantities. When allowance is made for these, it will be seen that the term of trade has not changed materially to justify the setting up of a new norm of exchange during 1935-36.

Taking the fiscal year 1935-36, then, as the period during which the change in the internal value is to be computed as compared with that in the three fiscal years from April 1, 1926 to March 31, 1929, the following average figures may be quoted for the two ways of measuring internal values referred to above:—

Internal prices.

	1926-29	1935-36	% fall
Bombay Cost of Living Index No.	151	102	32 %
Calcutta Wholesale Price Index No.	146	91	38 %

Thus there has been a *fall* in prices or a *rise* in the internal value of the rupee by about 35 per cent.

While the above two periods are suitable for measuring the change in the internal value of the rupee, they may be, and in fact are, unsuitable for measuring the change in external values. For the period of equilibrium in India may not be coterminous with that in foreign countries. In other words, the exchange rate and the price level may not be in mutual adjustment either in the gold *bloc* or in the sterling area. To take up the case of the first to start with, it is quite true that after the *de facto* stabilisation of the franc at a new rate in 1926 followed by *de jure* stabilisation at that rate in 1928, the exchange rate and the price level were substantially in equilibrium during the greater part of the period 1926-29. But there is no doubt that during 1935-36, francs were considerably overvalued. Opinions may differ as to the extent of the overvaluation; but in view of the fact that the gold value of the franc had to be lowered on October 1, 1936 by a proportion lying between 25·19 per cent. and 34·35 per cent. of its former value, we have thought it advisable to inflate the actual franc exchange rate by 30 per cent. This will bring the exchange rate almost to the level of the rate current on Dec. 1, 1936 as quoted in the Calcutta Money Market, on which date the exchange rate and the price level for France were certainly far more in mutual adjustment than at any time during 1935-36.

Similarly for the sterling area, it is an economic commonplace that for the period 1926-29, sterling was overvalued by 10 per cent. The observed exchange value has therefore been scaled up to that extent. It is doubtful if the exchange rate and the price level were in adjustment during 1935-36, for there is a noticeable upward trend since the beginning of 1936, which seems to suggest that probably the internal price level is a little higher than what is warranted by the exchange rate. We have however thought it best to ignore this small adjustment, which, in any case, is not capable of being determined with any certainty. The relevant figures are quoted below:—

External value.

	1926—29	1935—36
I. Observed rupee-franc exchange rate, francs per Rs. 100 (calculated from the exchangerates for francs and rupees in terms of American cents published by the League of Nations, as the actual market quotations are not available in Indian Official returns).	987	558
Do. on the assumption that the franc was not overvalued during 1926-29, and by 30% during 1935-36	987	725
New Official French index number of wholesale prices (Base 1929=100)	105	55
Index number measuring the command of the rupee over goods and services in the gold *bloc*.	100	140
II. Observed rupee-sterling exchange rate.	1-5 15/16	1-6 3/32
Do. on the assumption that sterling was overvalued by 10% during 1226—29 but not during 1935-36 (in pence and decimals of pence per rupee).	19·73	18·09
Economist index no. of wholesale prices (Base 1929=100).	108	75
Index number measuring the command of the rupee over goods and services in the sterling area.	100	132

It follows therefore that there has been a rise in the value of the rupee by 40 per cent. in terms of gold and 32 per cent. in terms of sterling. In other words, the rise in the external value of the rupee during 1935-36 as compared with that during 1926—29 is of the same order as the corresponding increase in the internal value.

Thus there was no case for devaluation during the whole of the fiscal year 1935-36. Exact calculations have not yet been made for any subsequent period, but there is plenty of indirect evidence to show that even after the devaluation of the franc the external and internal values of the rupee are substantially in mutual adjustment.

APPENDIX I.

Table showing averages, maxima and minima of certain series, calculated from twelve-monthly moving averages of monthly figures from April 1, 1926 to March 31, 1929.

	Av.	Max.	Min.
1. Calcutta Wholesale Price Index No. (Base July, 1914=100)	146	148	145
2. Bombay Cost of Living Index No. (Base July, 1914=100)	152	155	147
3. Value of Indian Exports in Rs. Crores.	26·6	27·7	24·9
4. Value of Net Imports in Rs. Crores.	19·6	19·9	18·8
[3]5. Index No. of Export Prices (Base July, 1914=100).	144	146	141
[3]6. Index No. of Import Prices (Base July, 1914=100).	151	153	146
7. Index No. of $3\frac{1}{2}\%$ Govt. Paper (Base July, 1914=100).	80	81	77
8. Rupee Sterling Exchange Rate.	1-5$\frac{15}{16}$	1-6	1-5$\frac{7}{8}$

For testing whether the three fiscal years were more stable than the preceding and succeeding years, the corresponding figures for those years were also studied showing much greater divergence betwen maximum and minimum values. To keep the paper within the prescribed limits, these figures as well as the illustrative charts have been omitted.

[3] Calculated by us in the Statistical Laboratory, Presidency College, as explained above.

APPENDIX II.

Twelve-monthly moving averages (centred) of certain series calculated from monthly data from April 1926 to March 1929.

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
End of Sept.	'26	146	155	25·1	18·8	142	153	81	17·88
„ Oct.	'26	146	155	25·0	18·9	141	152	81	17·88
„ Nov.	'26	146	155	24·9	19·0	141	152	81	17·88
„ Dec.	'26	146	155	24·9	19·0	142	152	81	17·88
„ Jan.	'27	146	155	25·1	19·0	142	152	81	17·88
„ Feb.	'27	147	155	25·4	19·1	143	152	81	17·88
„ Mar.	'27	147	155	25·7	19·2	143	152	81	17·88
„ Apr.	'27	148	155	26·0	19·4	144	152	81	17·91
„ May	'27	148	154	26·5	19·7	145	152	81	17·94
„ June	'27	148	154	26·7	19·8	145	152	81	17·97
„ July	'27	148	154	26·8	19·9	145	151	80	17·97
„ Aug.	'27	147	153	26·8	19·9	145	150	80	17·97
„ Sept.	'27	147	152	26·9	19·8	146	149	80	18
„ Oct.	'27	147	152	27·4	19·8	146	149	80	18
„ Nov.	'27	147	151	27·4	19·8	146	148	79	18
„ Dec.	'27	147	150	27·6	19·8	146	147	79	18
„ Jan.	'28	147	150	27·6	19·8	146	147	79	18
„ Feb.	'28	146	149	27·5	19·7	145	147	79	18
„ Mar.	'28	145	148	27·5	19·8	144	146	79	18
„ Apr.	'28	145	148	27·7	19·9	144	146	78	18
„ May	'28	145	147	27·7	19·9	144	146	78	18
„ June	'28	145	147	27·7	19·8	143	146	78	18
„ July	'28	145	147	27·7	19·7	143	146	78	17·97
„ Aug.	'28	145	147	27·6	19·8	143	146	77	17·97

(1) Calcutta Wholesale Index No.

(2) Bombay Cost of Living Index No.

(3) Value of Net Exports in Rs. Crores.

(4) Value of Net Imports in Rs. Crores.

(5) Index No. of Export prices.

(6) Index No. of Import prices.

(7 Index No. of 3½ per cent. Govt. Paper.

(8) Rupee Sterling Exchange rate in pence.

THE RELEVANCE OF ACCEPTED ECONOMIC THEORY TO INDIAN CONDITIONS

(Paper read at the Indian Economics Seminar at the London School of Economics)

BY

MISS L. C. M. OUWERKERK, TRIVANDRUM.

No economist having any knowledge of Indian economics can fail to be struck by the lack of interest taken by Indian economists in theoretical Economics. The Indian economist is almost exclusively concerned with practical problems such as those of cooperation, marketing, taxation, debt; the theoretical discussions introduced at the Indian Economic Conferences almost invariably fall flat;[1] and I think I am correct in saying that in all the recent advances in economic theory no Indian economist has taken an important or even an appreciable part. I should assign two reasons to this lack of interest in theoretical Economics. One reason seems to me to be that the pressure of practical economic problems in India is so great that the heart and mind of the Indian economist are almost exclusively engaged in trying to solve them. In a country like India, where poverty is so deep and widespread, theoretical Economics may well be regarded as an intellectual luxury. The second reason is that the picture of the economic world presented by the orthodox teaching of Economics is an unreal one to the Indian student. It is this latter reason which I wish to analyse more fully in this paper.

It would be superfluous to deal at length with the charge that theoretical Economics is a luxury. It is the necessary groundwork, the very grammar, of applied Economics; it is an essential mental discipline for those who wish to think clearly and judge wisely in the complex phenomena of actual economic life. The neglect of the former can and does lead to serious weakness in the latter; where the groundwork is poor the superstructure is weak. It is true that theoretical Economics has its dangers; its abstract developments are so fascinating that they lead one away from realities, till Economics becomes an armchair occupation, a battle of the schoolmen. And some of its mathematical refine-

[1] Those who were present at the Agra Economic Conference will appreciate the fact that these lines were written before that Conference took place.

ments are nothing but intellectual luxury. But however true that may be, it does not detract from the value of theoretical studies as an approach to the analysis of practical problems. The comparative neglect of theoretical Economics is the cause of an enormous wastage of intellectual effort among the students passing through our Colleges who take Economics. The ordinary student is as a rule both puzzled and bored by the subject; to only a few does it ever become more than merely one of the subjects that has to be ground through for the sake of the magic letters "B.A."; and it is not uncommon to find B.A.'s who have studied Economics subscribing to the most elementary fallacies about practical problems which would have been impossible had their theoretical grounding been more sound. It is a question, not merely of academic interest, but of practical importance, to make theoretical Economics of more vital interest to the Indian student, and a better mental discipline than it so often proves to be.

And this brings me to my main subject—the relevance of orthodox theory to the conditions of Indian economic life. We must begin with the fact that the conditions of Indian economic life are strikingly different from those of the West, even in these days of rapid change, and we must ask ourselves the question whether Western economic theory is really relevant to such different economic conditions and whether they do not rather necessitate an entirely different theoretical approach. There are in particular two assumptions in Western Economics which must strike a note of unreality in the Indian student's mind, and yet on these is based the whole of the pure theory of Economics. The primary assumptions of accepted economic teaching are, first of all, perfect competition and perfect mobility of the factors of production and of goods.[2] The second assumption is that of the perfect divisibility of the economic unit, be it consumption goods or factor of production; and it is on these assumptions that the whole theory of what we may call marginalism is based. The picture that is presented, taking these assumptions as its basis, is admittedly highly abstract, yet is recognisable as an idealised picture of the economy of the Western world.

But is it so recognisable to the Indian student of Economics? One can fully understand the bewilderment of the average Indian student on his first approach to the subject, the feeling

[2] I am of course here referring to *accepted* economic teaching. Mrs. Robinson's theory of imperfect competition offers a more logical and coherent approach to the theory of value than the older method of assuming perfect competition to be the normal case and monopoly a special case; but this approach has hardly won acceptance in English Universities—let alone our Indian Universities!

that the thing he is studying is not real, but simply something "out of a book." It is not merely that the phenomena of large-scale production, of banking, of international trade, and so on, are unfamiliar to the Indian student—they are so to many a Western student at the outset of his economic career; the essential point is that this picture fails to be an idealised and abstract picture of that economic world with which he is familiar—the economic world of the Indian small town or village.

I am going to suggest another picture, equally abstract and idealised, which it seems to me would yet give the Indian student a greater feeling of reality than the one usually presented to him. I begin with the isolated, self-sufficing village, and as a first step ignore all outside trade. Within this village there is perfect immobility; the quantity of land is fixed; the quantity of labour is fixed; the division of the labourers among the different occupations is fixed and determined by caste. The division of the product of industry, *i.e.*, the agricultural harvest, is effected on the threshing floor at the time of harvest. There can be no question in such a village of the perfect divisibility of the units of the factors of production; each group of labourers is rendered indivisible by the institution of caste. In such conditions the marginal approach becomes irrelevant, and cannot explain the determination of values or the division of the product of industry.

Do such conditions require a separate theory? The usual practice is to dismiss the situation as "non-economic" because it is non-competitive; but this does not really dispose of the problem. The problems of a non-competitive society are none the less economic problems; they still conform to the Robbinsian definition of the problem of the apportionment of scarce means among a multiplicity of ends; but they happen to require a different explanation from that which will explain the operation of a competitive society. Such a society is perhaps best described as a rigid society. It must be carefully distinguished from the static society such as is described by J. B. Clark or R. F. Knight. The economic situation in a static society is at rest because economic forces, having theoretic perfect fluidity, have fully worked themselves out till an equilibrium position is reached; the rigid society is at rest, not in this sense, but in the sense that change is impossible.

I should like to phrase it that the determination of values and of the division of the product of industry is a social determination and not a marginal one. Value and distribution are of course but two sides of the same shield, treated separately to

some extent in economic theory for convenience' sake; but in the idealised picture of the Indian village that I have drawn the two are conpletely inseparable. There is not so much an exchange of goods as of services, and the distribution of the product of industry takes place according to the social estimation of the value of the services.

Let us begin with the simplest case, the agricultural village in which there are only two groups, landowners and cultivators. The landowners have all the land, the cultivators all the labour; social convention forbids the landowners to work for themselves, or the cultivators to depart from their lands. It also forbids competition between landowner and landowner, and between cultivator and cultivator, so that practically speaking each class is an indivisible unit. We are faced with a problem of bilateral monopoly, and the division of the product of industry is theoretically completely indeterminate. There are of course limits —one the starvation of the peasantry, the other the murder of the landowners and the seizure of the land by the peasants. (Neither of these limits, by the way, is as fantastic as it sounds, put thus crudely; the first has not been unknown in India, nor the second in Russia during the Revolution.) Bargaining power in the usual sense cannot arise, for bargaining power ultimately resolves itself into a power of withdrawal from the market, of the withholding of part of the supply until the marginal demand of the consumer is balanced with the marginal need of the supplier; but here there can be no withdrawal of land or labour from the market as there can be no alternate use for them. The only possible determinant is social custom and the relative social strength of the two parties; and we know that this is actually the determinant of the division of the product of industry in those villages where payment runs on traditional lines. Let us introduce more classes into our idealised village—the *dhobie*, the carpenter, the smith, the sweeper—and it is still social custom that dominates the distribution situation. Religion of course is possibly the biggest single element in determining and stabilising distribution; though to some extent religion does not determine the situation but only confirms what has been determined by other social forces.

Here we have a picture of Indian village economics which is a first approximation to the analysis of actual conditions. As in the orthodox economic theory, we have started from a position of rest, and we must now introduce changes in order to approximate more closely to actual conditions. These changes may be of two kinds: they may come about through certain social

changes which in themselves do little or nothing to alter the inherent rigidity of the economic structure; or there may be modifications in the rigidity of the economic structure which introduce entirely new elements into the situation and which require an entirely different explanation. The first requires no separate explanation: an example would be the strengthening of the power of the Rajah through war, which leads to an increase in the share that he feels he can claim in the total produce. But any factor bringing about a break-down in the isolation of the village would modify and even destroy the rigidity of the economic structure, for it would bring with it the possibility of alternate uses of land and labour. What tends to happen under such conditions can no longer be explained in terms of social determination, but does require the more elaborate analyses of the marginal theory to explain it. For with the possibility of alternate uses of land and labour there arises the power of withdrawal from any one use; that brings with it the possibility of bargaining between the user and supplier of the factor; and this process of bargaining involves in its turn the balancing of conflicting considerations of cost and return, of advantage and disadvantage in alternate uses, and the emergence of a margin at which these conflicting considerations are balanced. In short, as soon as any fluidity at all is introduced into the economic structure, features appear which make it approximate to Western conditions, and which can only be interpreted in terms of economic margins.

The truth is that two separate theories are relevant to Indian economic conditions, and they can only be clearly and satisfactorily explained with reference to both. In actual Indian economic life, a fluid system has been superimposed upon a rigid structure of society, and we can only explain it by reference to theories dealing with, first, a rigid economy in which change is impossible, secondly, the system of free enterprise which tends to equilibrium as a result of the fluidity of economic forces. The usefulness of this dual explanation seems to be particularly great for the elucidation of rent problems, that happy hunting ground of economic confusion. Indian rents simply do not lend themselves to marginal analysis; they can only be effectively explained as shares in the economic product determined by social forces. Something of the sort has been excellently done in Banerjea's little introductory book on Indian Economics. The economic aspects of serfdom, rural indebtedness, the earnings of labourers in village industries, can all be better explained if the superimposition of free enterprise upon a rigid structure of society is borne in mind.

I am fully aware of the sketchiness of the ideas I have put forward, but I have simply tried to answer the question: Can Western economic theory explain Indian economic phenomena? And my answer is, in short, that it can explain a great deal, and in fact it is essential to the explanation of Indian economic conditions as soon as any fluidity develops in the economic structure. But by itself it is inadequate; there is still so much rigidity in the Indian economic structure that a special theory should be devised to deal with the phenomena of rigid conditions; and it is only by a synthesis of the two theories that an adequate explanation is possible.

IMPORTS OF GOLD IN INDIA BEFORE 1931

BY

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One of the most remarkable features of India's foreign trade has been a steady net import of gold and silver every year, until September 1931 when, as is now well-known, the tide definitely turned. The quickness with which the inflow of precious metals was absorbed in private hoards, without having any visible effect on the credit or currency reserves of the country, has been an object of envy for foreign historians who have, not unreasonably, given the name, or rather the nickname of a "Sink of Precious Metals" to this country.

The Value and Quantity of Gold Imports.

It is not possible to estimate, with any accuracy, the total net imports of gold into India up to September 1931, as no reliable record was kept prior to the advent of the British and even a long time after the British had established their supremacy. Some idea of the extent of such imports can, however, be formed by a study of the total gold hoarded by the people in India. But even here the estimates are admittedly rough. "Probably the earliest estimate was that of H. D. Macleod, who was the first economist to get the Indian hoards on his brains. He tormented himself with the belief that the Indian hoards must be no less than £300 millions. Lord Curzon estimated them at Rs. 825 Crores, while Arnold Wright, writing in the *Financial Review of Reviews*, December 1916, puts them at £700 millions. Mr. E. L. Price is inclined to accept a recent estimate of the American Trade Commissioner, namely, £1000 millions. Mr. Francis Skrive thinks that even this is very much of an underestimate. So that, with every fresh calculator, the calculations have proceeded in a regular *crescendo* movement." Thus no direct or indirect statistical evidence of a reasonable degree of accuracy, regarding the total gold imported into this country before 1931, is available.

The figures of net imports during the last quarter of the nineteenth, and the first thirty years of the twentieth, centuries will be found in the tables given below.

TABLE I

Net Imports of Gold (Bullion and Coin) into India

Average of 5 years ending	Net Imports (Lakhs of Rs.)
1873-74	1,38
1878-79	,64
1883-84	4,13
1888-89	3,08
1893-94	2,10
1898-99	2,25

TABLE II

Net Imports of Gold (Bullion and Coin) into India since 1900-01.

Year	Value in Lakhs of Rs.	Quantity in thousands of ounces
1900-01 to 1904-05	31,17	Not available
1905-06 to 1909-10	58,72	Do.
1910-11 to 1914-15	126,71	20,556
1915-16 to 1919-20	67,07	10,729
1920-21 to 1924-25	143,54	22,599
1925-26	34,85	6,136
1926-27	19,40	3,386
1927-28	18,10	3,182
1928-29	21,20	3,785
1929-30	14,22	2,524
1930-31	12,75	2,243

The two tables, given above, show that in the present century alone, there has been a net import of gold worth about Rs. 548 Crores. The figures for the last quarter of the 19th century would, on the basis of the averages available in Table I, be somewhere about Rs. 68 Crores. Though no reliable figures are easily available for the period prior to 1875, it is enough for our purposes to note the trend of events during the last half a century or more.

Causes of Gold Imports.

The annual steady net import of gold into India was due to the favourable balances of trade and the hoarding habit of the Indian people. The government's policy of raising loans abroad was also a help in this direction.

Long before the establishment of the British rule in India, we have had balances of trade continuously in our favour, and since there were, then, no remittances to be made abroad on account of any political, military, financial or commercial services rendered by foreigners to India, the balance of International account was also usually to the advantage of India and we could therefore import large quantities of gold and silver every year.

In more recent times, however, India has lost her enviable position, and though the balances of trade in merchandise have as a rule continued to be favourable, there are large foreign commitments that have to be met every year on account of Government stores purchased in England and other invisible imports of services, *e.g.*, payment of interest charges on loans incurred in the United Kingdom, the India Office expenses, pensions of civil and military officers residing in England, leave salaries of officers on furlough, earnings of foreign steamer companies, bankers, insurance companies, and commission agents, remittances to Indian students and tourists abroad etc., etc., with the result that the balance of payments has in some years turned against us. Still the position was quite satisfactory, until the recent depression set in, and the balances of trade were reduced almost to a vanishing point.

TABLE III

Balance of Trade in Merchandise (Private)

(In Lakhs of Rs.)

Average of the 5 years ending	Balance of Trade
1888-89	30,06
1893-94	37,16
1898-99	37,66
1903-04	46,09
1908-09	53,46
1913-14	78,27
1918-19	76,31
1923-24	53,14
1928-29	112,80

Year	
1929-30	78,98
1630-31	62,05
1931-32	34,83
1932-33	34,22
1933-34	34,74
1934-35	22,96
1935-36	30,55

It is thus clear that up to 1928-29 India had fairly large balances of trade in her favour which normally enabled her not only to pay for the invisible imports, but also for the large quantities of gold and silver demanded by the people. It would however be a half-truth to declare that these balances were, by themselves, a sufficient cause of the gold imports. For, in the first place while these balances were not consistently favourable to the import of gold, gold continued to flow in. It was the hoarding habit of the people which was at the back of this almost insatiable desire for gold and the favourable balances only provided the opportunity. That the people persisted in importing gold even in the face of unfavourable balances of payment cannot be explained in any other way.

Decline in the Imports of Gold.

There was however an unmistakable trend for the net imports of gold to decline in the years immediately preceding 1931, as can be seen from the table below.

TABLE IV

Net Imports of Gold and Silver in India

(Lakhs of Rs.)

Year	Net Imports of Gold	Net Imports of Silver	Net Imports of Treasure
1924-25	37,96	20,08	58,04
1925-26	34,85	17,12	51,97
1926-27	19,40	19,87	39,27
1927-28	18,10	13,84	31,94
1928-29	21,19	9,77	30,96
1929-30	14,22	8,62	22,84
1930-31	12,75	10,08	22,83

This decline in the imports of gold was due to (*a*) diminishing balances of trade which shrank steadily from an average of Rs. 112,80 Lakhs in the five years ending 1928-29 to Rs. 86,47 Lakhs in 1928-29, to Rs. 78,98 Lakhs in 1929-30 and to Rs. 62,05 Lakhs in 1930-31, (*b*) prevalence of distress which reduced the ability of the people to purchase gold, (*c*) the fall in the price of silver which made the white metal preferable to the yellow, and (*d*) (to a very small extent) the slow abandonment of the hoarding habit. While the contracting balances of trade made it more and more difficult for India to import gold, the depression and the fall in the price of silver saw to it that even those small quantities imported were not absorbed in private use but were returned to government at the statutory rate of Rs. 21-3-10 per tola.

"Another noticeable feature of the closing months of the year," wrote the Controller of Currency in his report for the year 1930-31, "was the considerable return of gold from up-country districts to Bombay. This inflow which commenced in March (1930) has been variously estimated at from 5000 to 6000 tolas of fine gold a day and in part, at any rate, represented gold taken out of hoards and sold to meet the current expenses of the owners."

It is difficult however to attach any considerable importance to the view that "with the growth of the investment habit in India gold imports for private consumption in India in future are not likely to be as large as they were in the past," for there is nothing substantial to point to the development of the investment habit among the people in India. The increase in the receipts of Post Office Cash Certificates in the years 1929-30, 1930-31 and 1931-32 has been taken to show "the broadening of the investment habit." But this increase was due mainly to the increase in the yield in August 1929 from 4½ per cent free of tax to 5¼ per cent free of tax; and again in September 1930 to 6 per cent free of tax. The investment habit, moreover, could not have been acquired so suddenly and that also at a time when Europe and America were taking to the habit of hoarding gold. The investment habit, therefore, played no significant part in discouraging the imports of gold. Sir J. W. Kelly, the Officiating Controller of the Currency in the year 1930-31 rightly remarked:—"The net imports (of gold) were 12,75 Lakhs, being approximately 1½ crores less than in the previous years. The fact that the figure is less than half of the average of the net imports for the years 1920-21 to 1925-26 and is in fact lower than an year since 1910 cannot be regarded as surprising, nor can

it be argued with any confidence that it indicates that India is giving up its secular habit of investment in gold. In view of the very heavy fall in commodity prices and consequent diminution in the surplus profits accruing to the owners of export crops, a decline in gold purchases was to be expected and it is worthy of note that in the peculiar circumstances of the year under report the decline was not greater."

How far, one may ask, was the import of gold prior to 1931 in the best interests of India? And, how far was the Government of this country responsible for the continuance of these imports? The answer to the first question is simple. If in certain years India had a balance of trade so favourable that it could meet its foreign commitments and yet emerge with a surplus, there might have been no considerable harm in the importing of gold, provided it was not hoarded away, for on no economic principles can the hoarding of gold be characterised as anything but grossly wasteful. But the actual situation was even worse; for even in years when the balance of account was unfavourable to India, the imports of gold were continued and this was made possible by the foreign borrowing programme of the government. Thus while our government was raising money abroad and paying huge sums by way of interest every year, while our industrial, agricultural and commercial development had been held up by the lack of capital, the people at large had been quietly hoarding up their assets under the 'mother earth' or in the form of jewellery. The situation, however, was not hopeless, and the government could have mended matters in more ways than one. It could, for example, have put a legal embargo, or at least a heavy duty, on the imports of gold; or it could have tried its best to raise as much money within the country as possible and only then gone to the English capital market. But most important of all, it could have taken steps to combat the hoarding habit in India and that would have been the surest way of striking at the root of the trouble. By spreading education far and wide, by giving up the negative attitude of keeping itself scrupulously aloof from all measures of social reform, by adopting an aggressively national industrial policy, by encouraging the banking and other deposit facilities available in the country etc., the government could, to a very large extent, have helped in removing the age-long habit, and as the custodian of all the legitimate aspirations of the people, the government could not shirk its responsibilities in this direction.

A CRITICAL SURVEY OF RAILWAY FINANCES IN INDIA SINCE 1924

BY

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The year 1924 is a turning-point in the history of railways in India. The following important changes were introduced in that year:—

(*a*) Institution of Depreciation Fund.

(*b*) Institution of Reserve Fund.

(*c*) Adoption of the Separation Convention.

The thesis of this article is to examine the effects of these measures and to suggest improvements.

A Short History.

The Government of India tried several experiments in the matter of construction and management of railways in the 19th century. Today, the state has very great interest in the railways on which capital has been provided wholly or mainly by the Government. The main divisions of these railways are:—

(*a*) State Railways worked by the State.

(*b*) State Railways worked by the companies.

Funds were provided from borrowings which form a part of the public debt, or surplus revenues or debentures issued by companies.

The system of guarantee adopted in the 19th century and operation of railways by the State meant a continuous burden to the taxpayer. Up to 1898 the total amount of losses aggregated Rs. 57·8 Crores. With 1899, the tide, however, turned.

Prior to 1924, the railway budget formed a part of the general budget. Naturally, funds for capital expenditure and allotments made for replacement and renewals of railway wasting assets depended on the commitments of the Government in other directions. The Mackay Committee of 1907 held that the Government should fix periodically a standard of annual capital expenditure and opined that it could be taken at Rs. 18·75 Crores,

but the Government could not see their way to accept that advice as will be clear from the figures:—

Year		Capital programme Rs. (Crores)
1908-09	...	15'00
1911-12	...	14'25
1911-12 (?)	...	13'50
1915-16	...	12'00
1916-17	...	4'50
1917-18	...	5'40
1918-19	...	6'30

Depreciation Fund and Overcapitalisation.

Prior to 1875, the system of renewal reserve funds existed on some of the old guaranteed railway companies. It was, however, abolished in that year for it was considered that it would be unfair to the state. Thereafter, revenues were debited every year with such cost of renewals as could not be debited to capital account. Two defects followed as a result of absence of depreciation fund, *viz.*, (1) funds, when needed most, could not be made available, (2) sums, which should be ordinarily debited to revenues, were debited to capital account.

The first leads to inefficiency and we have the support of the Ackworth Committee. "There are scores of bridges with girders unfit to carry train-loads up to modern requirements, there are many miles of rails, hundreds of engines, and thousands of wagons, whose rightful date for renewal is long overdue . . . . In our judgement a financial system which produces these results stands self-condemned."

The second leads to overcapitalisation, which is open to many dangers. It tends to raise prices (rates and fares in this case), to reduce the quality of a company's products (in this case comforts made available to the trader and passenger) and creates a bad ethical atmosphere in business. In this connection, the following figures are useful:—

Year	Mileage—state-owned and worked lines	Capital at charge Rs. (Crores)	Interest charges Rs. (Crores)
1924-25	32849	639	23'90
1929-30	35611	770	30'46
1931-32	36510	790	33'07
1935-36	36310	789	31'89

It is interesting to note that during the twelve years, the total mileage increased by only 3661 miles, while the capital at charge increased by 154 Crores. Evidently a large sum of money was spent on renewals of bridges and rolling stock etc. The increase in capital is accompanied by an increase in interest charges—Rs. 917 Lakhs. In recent years, however, there is a tendency for this head to decrease on account of conversion operations carried on by the State.

The need of instituting a depreciation fund began to be recognised by the Government as a result of the reports submitted by various committees. The Railway Finance Committee of 1921 reported: "We consider that the present method of providing for depreciation not by a proper depreciation fund but by allotting each year a grant from revenues for expenditure on renewals and replacements is open to many objections. We, therefore, recommend that early steps should be taken to calculate the rates of depreciation which should be allowed for the various classes of railway plant and materials and in order that the recurrence of the deterioration which has taken place in recent years may be avoided and depreciation for renewals and repairs provided for automatically." "The Inchcape Committee of 1923 also drew pointed attention of the Government to the desirability of instituting a depreciation fund, which could be drawn upon as necessary to meet current expenditure."

The Railway Board, in the meantime, appointed a committee to go into the question of the formation and working of the depreciation fund. It recommended that (*a*) the annual depreciation of the wasting capital assets of railways as they stood on 31st March, 1922, be calculated on two factors (1) estimated economic life of each class of assets, (2) replacement prices; (*b*) the annual depreciation on assets acquired after March 31, 1922, be calculated on the following basis:—

1st to 5th year	½%		On total capital outlay on wasting assets
5th to 10th year	1%	...	Do.
11th to 15th year	1½%	...	Do.
25th to onwards	2%	..	Do.

This suggestion is based on the fact that an asset in its early life does not depreciate as much as it does in its later life. No doubt, it would necessitate the maintenance of a detailed account of the life of wasting assets. The Government could not accept this recommendation on account of its being expensive.

They, however, abolished the old system and created the depreciation fund on 1st April, 1924. Its main features are:—

(1) It is to provide for the original cost of each particular unit of wasting asset during its life of usefulness.

(2) On replacement, expenditure to the extent of original cost of the article is debited to depreciation fund and the difference between the original costs and replacement cost is debited or credited to capital account as the cost of replacement is more or less than the replacement.

(3) It deals only with complete units.

(4) It does not provide for the replacements of what are called non-wasting assets, *e.g.*, land, fencing etc.

These arrangements continued up to 1935-36. Since then the contribution has been 1/60 of the capital at charge at the end of the previous year. The depreciation fund, as already said, is to provide for the original cost of the work replaced and not for the cost of replacement. It is not possible to throw in advance the possible price of a particular article. If an asset is replaced at a time of rising prices, sums debited to capital show an upward tendency.

The depreciation fund committee of 1921 and the Inchcape Committee of 1923 estimated the amount by which expenditure on renewals during the war period fell short of what would normally be spent. The former put it down at Rs. 20 Crores and the latter at Rs. 18·5 Crores.

There are two important questions, *viz.*, (1) whether when an asset is replaced, revenue should bear, either directly or through depreciation fund, only the original cost of the asset or the costs of its replacement by a like asset; (2) whether expenditure or improvements which are not sufficiently remunerative and on minor improvements and additions should be met from current revenues.

There can be no two opinions that from the point of view of prudent finance, the full cost of replacing an asset by like asset should be borne by revenues. The Railway Rates Tribunal of Great Britain holds a similar view. This practice is to be found with company-managed railways but not with state-managed railways. It is rather unfortunate. In 1929 it was calculated that renewal programme meant annually Rs. 2 Crores more to capital. During the last few years on account of fall in prices, it has come down to about Rs. 1 Crore. In short, this practice

alone has overcapitalised the Indian Railways to the tune of Rs. 17 Crores. Together with the arrears in renewals of the war period, the figure easily reaches Rs. 37 Crores.

It would not be out of place to see some of the effects consequent on the institution of depreciation fund. They are:—

(1) The rules of allocation, which were previous to the establishment of the fund very strict, were allowed and charges were admitted to capital on simple basis of cost.

(2) The company-managed railways refused to fall in line with the new rules.

(3) The contribution to the fund is in proportion to the assets in existence at present, whereas the withdrawals are proportionate to the assets in existence years ago which are falling due for replacement.

(4) Considerable increase in the capital at charge, accompanied by an increase in interest charges, has taken place.

To avoid overcapitalisation, the Government introduced a change in the system of allocation in 1936. It consists mainly in providing that capital should generally be charged only with that part of the cost of an asset renewed which represents a definite improvement and that all renewals should be charged to the Depreciation Fund. It would mean a reduction of capital expenditure by Rs. 1 Crore per annum. The change would be welcomed by all.

It is obvious that expenses on improvements which are neither revenue-earning nor expense-saving should not be debited to capital but to revenues. What items should be counted as such is purely a matter of opinion.

Again, expenses on minor improvements should be met from current revenues. At present, when the cost does not exceed Rs. 2000, it is charged to revenues, otherwise to capital. The limit is evidently low. The amounts debitable to revenues will vary with changes in limits as under:[1]

	Rs.	Rs.	Rs.	(in Lakhs)
Limit	2,000	5,000	10,000	Rs. 25,000
State-managed railways ...	10	24	40	90
Company-managed railways	3	7	13	27

[1] Railway Appropriation of Accounts 1934-35, p. 49.

The South-African Railways set aside $\frac{1}{6}$ of 1 per cent of capital revenues for such purposes. If the same percentage is adopted in India, the sum required would be Rs. 1·33 Crores.

According to strict business principles, railways cannot be understood to be making profits unless a certain sum is set aside which may go on accumulating and at the end of 60 or 70 years it may be possible to liquidate all debts. The adoption of this practice would necessitate setting aside of about Rs. 5 Crores.

Sir Otto Niemeyer in his report recommends "That the amount to be retained under Section (138) 2 from this should be:—

For a first period of 5 years, in each year, the whole or such amount as, together with any General Budget receipts from the Railways, will bring the Central Government's share in divisible total up to 13 Crores whichever is less, and . . . ." In other words the Central Government counts on the regularity of contribution from the Railways ranging from Rs. 5 Crores to 7 Crores.

With the adoption of the Separation Convention in 1924, the Railways have contributed Rs. 42 Crores, an average of three Crores per annum in addition to nearly 26 Crores on account of the loss on the working of strategic lines. The contribution, however, was suspended in 1931-32, and the accumulated arrears at the end of 1936-37 will amount to Rs. 30·75 Crores. The Separation Resolution provides that if in any year railway revenues are insufficient to provide a contribution to general revenues of 1 per cent on the capital at charge, surplus profits will not be deemed to have accrued unless such arrears were made good. In addition to this deficit, the railway borrowings from the Depreciation Fund at the end 1936-37 stand at Rs. 31·33 Crores. Thus the total liability of Railways reaches the respectable figure of Rs. 62 Crores. Starting on the assumption that railways will show sufficient surpluses, it would take 10 years to liquidate all this big liability.

The Railway Member, while introducing the budget for 1937-38, rightly remarked, "It will thus be impossible for railways to resume current contribution to general revenues within any reasonable period that can be foreseen. The wisest plan in the circumstances appears to be to write off all these liabilities and to start the next year on the basis of a clean slate so far as these liabilities are concerned." The Statutory Railway Authority thus gets a clean slate to write upon.

Evidently this bold step has been taken to make Provincial Autonomy, which came into operation on the 1st April, 1937, a financial success. In order to avoid the repetition of history,

earnest efforts will have to be made to increase income and to reduce expenses of the railway.

The Government of India appointed an expert committee some time back to suggest ways and means to cut down expenses. The report is anxiously awaited. Some of the steps which have been taken to improve earnings and reduce expenses of the railways are:—

(*a*) Introduction of special rates and fares wherever necessary.

(*b*) Adjustment of rates and fares to meet road competition and to attract traffic to railways. The Government of India have decided to put railways, roads and other means of communication under one member. This will go a long way to bring about better coordination between railways and roads with gain to both.

(*c*) Appointment of canvassers.

(*d*) Elimination of inter-railway competition.

(*e*) Special test checks of weights and declarations of goods consignments.

(*f*) Introduction of rail cars on certain sections of the Madras and Southern Maratha Railway.

(*g*) Introduction of the "Travel-as-you-please" tickets at cheap rates on Assam and Bengal Railway, and others.

The railway authorities deserve congratulations for all that they have done, but much remains to be done. Only a fringe of the problem has been touched. Before suggestions can be made for further improvements, let it be understood once for all that improvement on railways is intimately connected with industrial, commercial, educational, and political policies of the Government. All these problems have to be attacked simultaneously if any success is to be achieved. It is sincerely hoped that the suggestions made below will be found useful. They are:—

(1) The value of annual purchases of stores in a normal year might be taken at Rs. 30 Crores (approximately), of which more than half is the cost of imported materials. If the majority of the articles are manufactured in India, even though

under protection or subsidy, it is bound to improve the purchasing power of people and ultimately the income of the railways.

(2) Administration of the railways is top-heavy. What is needed is indianisation of services at the top and reduction of salaries of highly paid staff. Retrenchment of a Chaprasi here and a clerk there would not improve the situation. The following scale of cut in salaries is bound to improve the situation:—

Above Rs. 500/- p.m. ...	... 25%
Above Rs. 250/- p.m. ...	... 15%
Above Rs. 100/- p.m. ...	... 10%.

It is expected that the charm of Government service together with the benefit of railway free passes will continue to attract the type of intelligent and educated people as the Railways have done so far.

(3) The loss on strategic lines should be borne by the Military Department. This would mean a saving of about Rs. 2 Crores annually to the railways.

CROP FAILURES IN THE PUNJAB

BY

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Of every six seers of seed sown in the ground in the Punjab each year one seer fails to grow to fruition. This is the average for the Province taken as a whole. If we take only the irrigated portion—which is the only secure part of the cultivated area—only about six chhataks in the six seers (6 per cent.) fail. On the other hand if we consider the unirrigated part which has to depend on rainfall to bring to maturity the crops grown thereon—and this forms more than half (53 per cent.) of the total Punjab sown area—we find as much as nearly one and a half seers in the six (*i.e.*, one-quarter) fail to come to maturity.

This failure represents a great loss not only in the value of the seed but also in the time and effort wasted and the adverse psychological reaction on the farmers. The value of ten major crops grown in the Punjab was estimated at a little less than 42 crores of rupees in the year 1933-34,[1] so that the loss in that year alone would account for over 7 crores which is more than the total land revenue of the Province (5 crores). To reduce this recurring loss is an urgent problem indeed for the return from the land to the cultivator is already so low that he can ill afford to waste any of his meagre resources.

A large part of this failure is due to lack of rains or their unseasonable character. Farming in India has been popularly called 'a huge gamble in the monsoons.' The success or failure of countless toiling peasants in the country depends on the rains; and these have been characteristically described as having all "the caprice of the proverbial Eastern potentate."[2]

What makes matters worse for the Punjab is that it is situated outside the main track of the monsoons, and whatever rain it

1 See "*Review of the Trade of India*" for 1934-35, page 12; also "*Agricultural Statistics of the Punjab*," (Board of Economic Inquiry, Punjab, Publication No. 52), page 39, for other estimates.

2 M. L. Darling: "*The Punjab Peasant in Prosperity and Debt*," 1932 edition, page 90.

gets is 'on the rebound' after the clouds have spent their fury on the Himalayan wall obstructing their path. The average rainfall is less than 30 inches, the amount decreasing as we go south-westwards, being only six inches in the districts of Multan and Muzaffargarh.

The Punjab may be divided into four rain-belts. The first is the Himalayan which receives a precipitation of well over 60 inches—(Kangra gets 116 inches and Simla 63 inches). Next comes the Sub-Himalayan or Sub-montane, the plains lying at the foot of the mountains and getting between 30 and 40 inches of rainfall. Below this is a fairly wide belt—the "Indo-Gangetic Plain West"—stretching from Gurgaon in the south-east to Attock in the north-west, and getting annually somewhere between 15 to 30 inches. And lastly there is the area comprising the Canal Colonies and the south-western districts which gets from a few drops in a bad year to ten or fifteen inches in a good one.

It is in this last belt that the canals have brought about an amazing change: "In the early nineties, a man journeying south from the Jhelum to the Sutlej would have had to traverse 150 miles of some of the ugliest and dreariest country in the world . . . his way would probably have lain through an endless waste of bush and scrub, with little sign of life beyond the uncertain footmark of camel, buffalo and goat, and the movable dwelling of the nomad grazier, with its roof of thatch propped upon wooden poles."[3] The eastern and central portion of this area is now under the "Canal Colonies," the most flourishing rural tract in the whole of India where water runs in the canals the year round and desolation has given place to thriving cornland of well laid out fields with the pick of the Punjab peasantry to till them.

But more than half the Province still awaits the blessings of perennial irrigation; some of it can be brought under canal-irrigation, but the configuration of a large part does not make this possible, and it is this latter area which requires the greatest amount of attention.

The unirrigated areas may be divided into four major blocks. The first covers the western portion of the Punjab from the Salt Range in the north, a gaunt outcrop of saline hills in the midst of arid, desolate country, to the point in the south where the combined waters of the five rivers of the Punjab join the Indus River. The area is called Sind Sagar Doab and lies between the Indus and Chenab rivers. It is the largest single

[3] Darling, *op. cit.*, page 117.

block of land in the Punjab awaiting development; and the countryside is a vivid reminder of what the Canal Colonies must have looked like before the advent of the canals. Road and rail are few, the heat of the summer is terrific and wells from welcome oases having been dug as much for watering cattle as for irrigating the small plots around them. The Thal Irrigation Project aims at bringing irrigation to this tract by a system of canals taken out of the Indus at Kalabagh. An obstacle to its commencement, however, has been the long-standing water disputes between the Punjab, Sind, Bahawalpur and Bikaner governments, particularly those between the first two as the success of the Sukkur Barrage in Sind depends on an assured water-supply.[4]

The southern portion of this doab is irrigated by the Indus and Chenab inundation canals. These canals have to depend for their supply on the riverfloods which here have been described as follows: "The time of their coming, the continuity and their total amount can neither be calculated nor controlled since they depend on the winter snowfall in the inner Himalayas, the time of its melting, the local rainfall, the monsoons in the northern Punjab and the action of the torrents in the north of Dera Ghazi Khan District. Generally the floods are scanty and precarious during May, June, September and October, the seasons of the summer and winter sowings, but are in great excess of the need of the crops in July and August."[5] The rainfall of this area, as already mentioned, is about six inches, but "nowhere is it enough for the crops to be ripened on it alone . . . the time of its fall is more important and the benefit or loss that it may cause depends on the floods: what is too early or too small a fall one year may be too late or too heavy the next, and as often as not the rain does harm and not good; particularly in the summer, coming at the time of maximum flood when water is anyhow in excess, it damages the date harvest[6] without helping the crops."[7] It is, therefore, no wonder that, as will be shown later, failures of crops are heavy in this area.

[4] A recent press message says: "The Government of India have generally accepted the recommendations of the Committee on the Distribution of the Waters of the Indus and its Tributaries, and have thereby ended a long-standing dispute between the Governments of the Punjab, Sind, Bahawalpur and Bikaner." *C. & M. Gazette*, dated 1st May, 1937.

[5] Muzaffargarh District Gazetteer, page 102.

[6] The date-fruit forms the staple food of the poor in this tract for about four months in the year.

[7] J. D. Anderson: "*Measures possible for the Improvement of Economic Conditions in the Muzaffargarh District*," page 1.

The next largest block of unirrigated land is in the south-eastern Punjab—the 'famine area' *par excellence* of olden days. It comprises the districts of Gurgaon, Rohtak and Hissar; and is one of the best cattle-breeding tracts in India producing the famous Hariana cattle. Although the modern means of communications and organised relief measures have laid the spectre of food famine, fodder famines are still all too prevalent and take a heavy toll of animal life. Strangely enough this fodder scarcity helps to keep the breed at par by weeding out the weaker and inferior cattle.

The Western Jumna Canal (completed in 1886) irrigates the northern portion of Rohtak and the centre of Hissar districts. Gurgaon is too undulating to admit of canal construction and whatever irrigation there is, is from bunds erected in the river-beds to divert the storm-water, or by lifting water from ponds where rain water has collected.

The Hissar District is too far south to be served by the Sirhind Canal (completed 1887) taken out from the Sutlej near the hills, but the projected Bhakhra Dam Project[8] will enable canal-irrigation to be extended in this district also and at the same time relieve the water of the Western Jumna for use elsewhere.

The water-table in the south-eastern Punjab is in general over 100 feet below the ground surface. Owing to the loose nature of the soil well-digging is fraught with danger, and the chances are even that the water when reached would turn out to be brackish and unfit for irrigation or for drinking. Everything hinges on the rains of which about 20 inches should fall every year. What usually happens is that in some years thick clouds appear but not a drop falls and in other years there are such heavy downpours that the seed is washed away, or the rains come so late that the seed has shrivelled up. Again rainfall is very uneven in distribution, one village may become an island due to floods and an adjoining one not have even a sprinkling to lay the dust. It is for these reasons that about one harvest in three is a complete failure and life is more a struggle with nature than an enjoyment of her bounty.

The third unirrigated block lies along the foothills of the Himalayas from Ambala to Attock. Here the country is scarred with ravines making canal engineering difficult. Rainfall is

8 The Bhakhra Dam Project provides for the construction of a reservoir dam 400 feet high across the river Sutlej near Bilaspur where the river debouches from the Himalayas. It will impound 120 million cubic feet of water; the Assuan Dam across the Nile in Egypt impounds only 36 million cubic feet of water.

usually sufficient but owing to the indiscriminate denudation of forests which once clothed the hillsides in olden days, the streams get into sudden spate after downpours of rain in the mountains, and bring destruction to standing crops or put good land out of use by washing away the soil and replacing it with a layer of sand on which nothing will grow. The sub-soil water is however not deep and wells can be easily dug. The Jullundur District although farther from the hills has no canals and supports a heavy population by using wells to assist rainfall. In the north-west (Jhelum, Rawalpindi and Attock) the country is of "stony uplands, where sustenance must be drawn from rock, ravine, and hill, and bullock and ploughman have to pick their way uneasily between boulder and stone."[9]

Besides these large areas of unirrigated land there are in nearly every canal- or well-irrigated village small areas which are too high or too remote to receive water, and have to depend on rainfall for cultivation. These add their quota of crop failures.

With this general description the accompanying table showing the extent of crop failures in the Punjab will be more intelligible. It is based on the sown and failed acreages on irrigated and unirrigated areas in each district of the British Punjab, as shown in the *Season and Crops Reports*; the figures are the average of the fifteen years, 1921-22 to 1935-36. The 29 districts have been divided into seven economic groups, and the districts comprising each group are shown in the footnote to this page.[10]

In this table the Multan District has been included in the West and South-west group although about a third of it is under perennial canal-irrigation and the remaining two-thirds under inundation canals. This is because the village economy in Multan conforms to that obtaining in the tract in which it has been included. The compact village sites of the other parts of the

9 Darling, *op. cit.*, page 77.

10 *East and South-east*—Gurgaon, Rohtak, Karnal, and Hissar.

West and South-west—Mianwali, Muzaffargarh, Dera Ghazi Khan, and Multan.

North-west—Attock, Rawalpindi and Jhelum.

Sub-montane—Ambala, Hoshiarpur, Gurdaspur and Sialkot.

Mountainous—Simla and Kangra.

Central—Ludhiana, Jullundur, Amritsar, Ferozepore, Lahore, Gujrat and Gujranwala.

Canal Colonies—Sheikhpura, Montgomery, Lyallpur, Shahpur and Jhang.

Punjab give place in south-western Punjab to scattered habitations around wells, the 'village' taking its name from a central *abadi* in which lives the large landowner, to whom the rest of the population in larger or smaller measure owe almost feudal allegiance. The north-west districts are shown separately since, as already mentioned, they are hilly and broken and the fields are often terraced; there are no canals, the climate is dry, the winters long and bracing, and the people have affinity with the turbulent races of India's north-west border-land.

It will be seen from the table that the largest amount of crop failures takes place in the eastern and south-eastern districts, where on the average nearly one-third (32 per cent.) of the sown area fails to reach maturity each year. "The feature of absolute drought and failure of rain is a remarkable one in these parts. Every considerable town and village can point to its former site or sites, prior to such and such a famine or drought, which depopulated the country, and these occurrences appear to serve as eras in the popular record of the past."[11] This tract forms one-fifth of the total cultivated area of the Province.

The next tract is the West and South-west where nearly one-quarter of the crops (22 per cent.) fails annually: the area represents one-eighth of the Provincial cultivation. It might appear strange at first sight that failures should be so high with 60 per cent. of the land under irrigation. This is due, as already explained, to the uncertain supply from the inundation canals, and it is almost a misnomer to call the tract "canal-irrigated." (It will be seen that among 'irrigated' lands this area shows the largest failure in the Punjab—18 per cent.)

The third on the list is the North-west group, but it represents only 7 per cent. of the Provincial cultivation. Only 4 per cent. of the cultivated land is irrigated, mostly from wells or torrents, but rainfall is relatively plentiful being about 30 inches. Even so one-fifth (20 per cent.) of the crops fails on an average each year.

11 *Rohtak District Gazetteer* for 1883-84, page 34.

Crop Failures in the Punjab

(*Average of fifteen years, 1921-22 to 1935-36*)

Economic group.	IRRIGATED			UNIRRIGATED			TOTAL			
	Sown	Failed	Per cent failed to sown	Sown	Failed	Per cent failed to sown	Area	Sown Per cent to Provincial total	Failed Area	Per cent to sown
	Acres	Acres		Acres	Acres		Acres		Acres	
East and South-East...	1,074,082	75,366	7·2	5,181,366	1,923,629	37·1	6,255.448	20	1,998,995	*32*
Percentage	*17·2*			*82·8*			*100·0*			
West and South-West	2,227,465	393,531	17·7	1,520,954	429,460	28·2	3,748,419	12	822,991	*22*
Percentage	*59·4*			*40·6*			*100·0*			
North-West ...	99,870	5,678	5·7	2,170,193	438,670	20·2	2,270,063	7	444,348	*20*
Percentage	*4·4*			*95·6*			*100·0*			
Sub-montane ...	796,543	21,040	2·8	2,891,371	470,288	16·3	3,687,914	12	491,728	*13*
Percentage	*21·6*			*78·4*			*100·0*			
Mountainous ...	180,985	6,311	3·5	605,594	77,621	12·8	786,579	2	83,932	*11*
Percentage	*23·0*			*77·0*			*100·0*			
Central ...	5,110,737	220,281	4·3	3,338,450	689,798	20·3	8,449,187	27	910,079	*11*
Percentage	*60·5*			*39·5*			*100·0*			
Canal colonies ...	5,172,145	205,277	4·0	890,276	188,431	21·2	6,062,421	20	393,708	*7*
Percentage	*85·3*			*14·7*			*100·0*			
The Punjab ...	14,661,827	927,484	*6·3*	16,598,204	4,217,897	*25·4*	31,260,031	100	5,145,381	*17*
Percentage	*47·0*			*53·0*			*100·0*			

The next group is the Submontane. It represents 12 per cent. of the Provincial cultivated area and shows 13 per cent. failures. Until comparatively recent times this area lay on the high road to Delhi from Central Asia. The main trade route entered the Punjab down the Kabul River valley and then "traversed the rich and flourishing submontane tract cutting all the Five Rivers at right angle till it entered the Jumna Valley, which it followed to the site of modern Delhi. Avoiding the thick submontane jungle the road yet lay sufficiently near to the Himalayas for the country to be fertile. The rivers were crossed at points where they were comparatively narrow and where firm banks enabled bridges of boats to be made in winter when the stream was at its lowest level."[12] It is because of this historical significance that the four districts comprising the group support nearly one-sixth of the present population of the Punjab.

The fourth group, Mountainous, is insignificant as regards cultivation. It represents only two per cent. of the cultivated land of the Province, and only one-quarter is irrigated by hill streams (*kuhls*). The population is sparse and exceedingly poor and although only 11 per cent. of the sown crops fails the effect on the people is disastrous.

The next group comprises the Central districts, the "Heart of the Punjab," inhabited by the sturdy Sikh Jat and Muslim Rajput peasantry with their traditions of hard work in cultivation and undaunted bravery in battles. The area supports a population of nearly 7 millions,[13] and the density comes to 445 persons per square mile or nearly one person per cultivated acre. Sixty-one per cent. of the cultivated land is irrigated and the average failure is 11 per cent.

Lastly, we come to the Canal Colonies, the most secure tract as regards cultivation in the whole of the Punjab. Eighty-five per cent. of the land is irrigated and failures come to only 7 per cent., the lowest in the Province. This group together with the Central, thus accounts for nearly half (47 per cent.) of the cultivation of the Province. Fortunately they are in a large part irrigated which makes the business of agriculture more secure; and one might almost say they help to keep the Province solvent.

The unirrigated tract on the other hand represents the areas where cultivation is more in the nature of a gamble. How true this is can be gauged from the table. The unirrigated areas

12 H. K. Trevaskis : "*The Land of the Five Rivers*," 1928 edition, pages 82-83.

13 The population of the British Punjab at the 1931 census was 23,580,852.

under crops represent 53 per cent. of the Provincial cultivation and the failures range from about 13 per cent. in the mountainous districts to over 37 in the east and south-east; the Provincial average failures for this class of land come to 25 per cent. The domination of rainfall on agriculture where artificial means of irrigation are absent can be seen from the case of the Canal Colonies where only four per cent. of the crops on irrigated land fails as against 20 per cent. on the areas which are purely rain-fed. Thus we may say that on more than half of the cultivated area of the Punjab one-quarter of the crops fails to come to maturity, or including the irrigated areas, one-sixth of the sown area in the Province proves a dead loss to the cultivator.

The problem therefore is clear. Much of the future prosperity of the Punjab lies in minimising this annual wastage, and the remedy lies in extending canal-irrigation as far as possible, especially in bringing to early realisation the Thal and Bhakhra Dam Schemes. Where however obstacles prevent canal-building every encouragement should be given to well-sinking or to means of conserving the available water-supply.

The human factor in this as in most other economic problems of the Punjab is of utmost importance. Unfavourable surroundings tend to make people thrifty or fatalistic and utterly regardless of the future. Thus we find in the south-east and south-west Punjab, where failures of crops are consistently large, the people instead of being careful with their meagre resources are most improvident. To inculcate in the Punjab peasants habits of thrift and economy is of paramount importance, since unless this is done, all efforts at development in the long run will fail for the simple reason that development of character has not gone hand in hand with extraneous attempts at making their life easier.

ENTERPRISE AND PROFIT

BY

M. A. HASAN,

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"The word profit" says Professor T. N. Carver "has the most indefinite meaning." I come across different theories of profits in different text-books. I shall attempt here, therefore, a brief analysis of profit and enterprise as accepted by the leading economists of the day, and show that the Theory of Profits fits in with the general theory of value; the Theory of Demand and Supply.

Profit is the share in the national dividend of a country or the distribuend of a business which accrues to enterprise for its use. Out of the sale-proceeds of his produce, the entrepreneur meets the preliminary expenses such as the price of the raw material, depreciation charges of capital and taxes etc. This leaves him his distribuend, out of which he pays rent, interest and wages to the hired agents. This leaves him his Gross-profits and deducting interest, rent and wages for the agents supplied by himself, he is left his economic profit, which is a remuneration for his enterprise.

This may lead one to think that profit is a kind of residue differing from the remuneration of other agents. This is due to the Entrepreneur being an employer and the other agents being hired employees, getting their hire-prices but profit is in essence a hire-price for the service of enterprise paid by the purchasers of the produce. It is the consumer's demand for the produce of the entrepreneur which is responsible for his existence in the industrial field.

Enterprise consists in bearing of risks and uncertainties attending upon an independent business and those who supply it are called Entrepreneurs. Those who have a great liking for putting their resources into ventures are called enterprising men while others who have very little desire for staking their resource into ventures and are content with certain incomes are not considered enterprising.

Enterprise is crystallized, however, into the different schemes of prospective uncertainty—bearing as insurance, dealing in futures, purchasing of shares of a company, etc., and like other

agents of production, it has a unit which may be worked out as a certain value of the resources invested in enterprises for a certain period of time. And as there are different classes of labour so there are different classes of schemes of prospective returns, to which in the course of industry resources may be exposed. And units of resources invested in different schemes may be compared with a unit invested in a representative scheme. And any unit of the total stock of units invested in a business may be called its marginal unit and its productivity the marginal productivity of enterprise in that business.

Now let us see what constitutes the demand for enterprise. The demand for enterprise is two-fold.

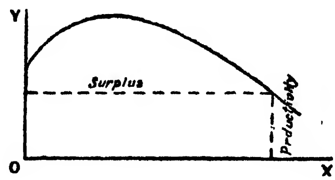
1. *Industrywise.*—The demand for enterprise, along with the other agents employed in a business or in an industry, is derived from the demand for its produce. The sale-price of the produce determines the distribuends of the producing units of an industry. The higher the demand price of the produce of an industry the larger the distribuends of the producing units in that industry. The distribuends being the productivity of the agents employed that part of it which is due to the marginal unit of land, labour, capital and enterprise is the marginal productivity of these agents. If at any time this marginal productivity is greater than the marginal supply-price of these agents there will be a tendency for the employment of greater amounts of agents and expansion of industry and firms in it.

2. *Agentwise.*—The demand for enterprise depends, to a certain extent, upon the supply of the other agents, which seek its co-operation in production. The greater the relative supply of the other agents, the greater the demand for the agent in question. With an increase in population the demand for land increases. The share of an agent of production in the distribuend and the national dividend can be found out by two methods. One applies to the agent whose supply is constant, *e.g.*, land and the other to the agents whose supply is variable.

The supply of land is fixed and labour, capital and enterprise increase from time to time, greater number of doses of labour and capital are applied upon land. The marginal productivity of the latter decreases, and the share of land in the form of surplus increases. This method is also applied in the case of enterprise or the other agents when the entrepreneur experiments by employing different quantities of other agents. He employs quantities such as their marginal productivity is equal to their supply-price and the share of enterprise is in the form of a surplus, but this surplus is in reality the productivity

of enterprise and if at any time this surplus exceeds the supply-price of enterprise, there will be a tendency for enterprise to increase.

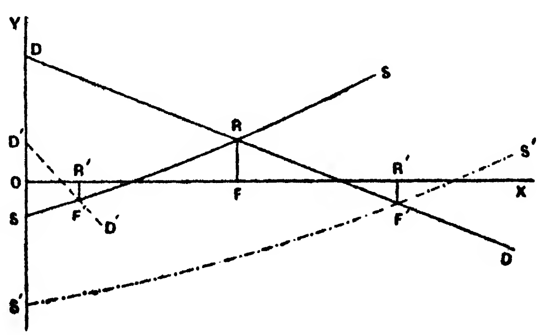
The second method applies to the share of the agent or agents whose supply varies. Their share is measured by the productivity of the marginal unit as is clear from the adjoining diagram.



The supply of enterprise on the other hand consists of the total resources of a country which bear risks and uncertainties of production. The share capital of a joint-stock company, the labour of producer's co-operation, artisans, and of those working under schemes of profit-sharing or labour-copartnership, and the land of peasant-proprietors all bear enterprise. While rented land, hired labourers and debenture-stock capital are not associated with enterprise. These enterprise-bearing resources of a country can be reduced into units of a certain value.

Enterprise has a supply-price and the supply-price of the marginal unit of enterprise is its marginal supply-price. The supply-price of small quantities of enterprise is negative like that of labour and capital but the supply-price for greater amounts is positive. It can be represented by a supply curve SS.

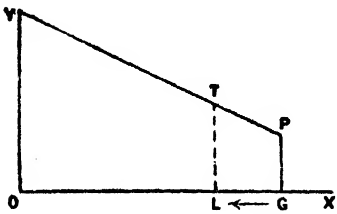
The rate of profit at any time is shown by a line at the point of intersection of the Demand and Supply curves, *e.g.*, RF in the diagram.

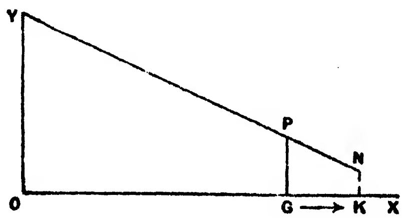


There is a possibility of a zero or a negative rate of profit, if the supply of enterprise were to increase very much or if the

demand for enterprise were to decrease very much as shown in the diagram by the lines R′F′ at the point of intersection of the dotted Demand and Supply curves (or in case the risks became extinct). The probability, however, is very little.

The gainless Entrepreneur.—Certain economists held the view that the losses of the Entrepreneur were offset by his gains and therefore in the long run the Entrepreneur got only interest on capital. The present-day Economists have proved that this is not the case. There is a positive profit for the remuneration of enterprise. An instance will make the point clear. A shoemaker working as a hired labourer in a firm gets a daily wage of Re. 1. If he starts making shoes on his own account and finds that his net daily wage is one day Re. 1-4-0 and the other day 12 annas he will stop working as an Entrepreneur because although his average income is Re. 1 its total utility is not equal in the two cases. The following diagrams make this clear.





OGPY in the two diagrams represents the utility of the daily wage of Re. 1 on two days, when he works as a hired labourer. And OLTY and OKNY represent the utilities of 12 annas and Re. 1-4-0 which he earns on two days working independently. The utility of the latter is smaller than that of the former because GKNP is smaller than LGPT. To induce him then to work as an independent businessman, the average daily wage must be greater than one rupee, say 18 annas, 2 annas is the positive profit for the uncertainty of income. The same applies to land and capital. To induce a landlord or a capitalist to work as an entrepreneur, the average rent and the rate of interest per annum must be higher than the contracted certain rent and interest which they can get by letting out their land and capital.

Another Economist held that the marginal Entrepreneur like the marginal land got no profit. This conclusion was wrong because the analogy between land and enterprise was not apt, inasmuch as land has no supply-price: While marginal land does not require any remuneration, marginal enterprise, capital and labour do require remuneration. No labourer, however weak he be, will be willing to work for nothing.

In brief:—

(1) Profit is the remuneration for enterprise.

(2) The rate of profit, at any time, is determined by the equilibrium between the demand for and the supply of enterprise.

(3) The demand for enterprise is derived from the Demand for its produce. The latter determines the distribuend of a business, which measures the productivity of the agents employed and that part of the distribuend which is due to Enterprise measures its productivity.

(4) The Demand for Enterprise also depends upon the Supply of the other agents. The greater their supply the lower their marginal productivity and the greater the surplus that accrues to Enterprise. This share in the distribuend is in the form of surplus if enterprise is treated as a constant quantity and if it is treated as a variable its share will be in the form of marginal productivity.

(5) The supply of enterprise means the total quantity of resources of a country, which bear risks and uncertainties. There is a positive supply-price of Enterprise and hence there is no gainless Entrepreneur.

MR. J. M. KEYNES C.B. IN THE LONDON TIMES

BY

H. R. Scott,

Kodaikanal.

I have just got copies of " The Times " of 12th, 13th and 14th January last with special articles by Keynes on " How to avoid a Slump? " presumably in sterling prices of essential commodities; but he does not give this explanation; there is however a sub-heading over his first letter reading " The Problem of the Steady Level " which words perhaps the editor interposed as meaning the general level of prices of wares, not to be confused with the market prices of fixed interest bearing securities or shares in industrial and other joint-stock enterprises, the annual income yield from which varies inversely with their daily quotations of sellers seeking ready money or the option of it in bank-cash.

I am pleased to see that Mr. Keynes recognises the gradual evolution from the former orthodox system of a fixed convertibility of gold into new paper money at the Bank and vice versa for export purposes, coupled with a variable rate of interest as dictated by the Central Bank of Issue which has now appeared in a fixed low Bank rate with a variable price of gold in pre-existing circulating paper money on which the credit structure is built in the form of a running option to the borrower but withdrawable at the discretion of the lender.

The fixed paper price of gold or Mint parity with a variable rate of interest was the prime cause of international friction over foreign debts also of booms and slumps due to borrowing from banks for productive purposes in excess of market requirements and subsequent restriction of these loans by creditors. Gold was regarded as the only true measure of value, store of value and final medium of international exchanges. Even today gold is regarded as the only sound and valid reserve or coverage against the issue of paper money, but it is being immobilized and therefore demonetized because gold is no longer obtainable in exchange for either Banknotes or currency notes then destroyed, except in France or America where the artificial parity of weight and fineness is subject to revision at the option of their Governments.

Our Government in India is hoarding some 41 crores worth of gold in its currency reserves with the notion that the prestige

of its notes is thereby enhanced in the eyes of the world and of those who accept them as legal tender in payment of all kinds of services or useful commodities of a perishable nature although it is under no obligation to redeem these pro-notes in anything but rupees of little real value now that the Mints are closed, except their scarcity as a medium of trade within this country. To adopt scarcity as the basis of value is to condemn the bulk of its subjects to undeserved poverty by pressure on all current market prices expressed in terms of this limited medium.

Gold has been demonetized although this basic fact is not yet generally realized but Japan has recently started to export her Government gold reserves, so let us hope that India under her new constitution will follow suit while the sterling market price is high so that she can use the proceeds for the redemption of her foreign obligations in London to the relief of her taxpayers.

Mr. Keynes is generally regarded as the leading authority on economic problems; he now admits that we have never tried to solve the riddle of recurring booms and slumps in market prices. They have been left to the free play of the law of Supply and Demand as manifested by shifting current prices under a system of *laissez faire* and these constant changes were and are still regarded as necessary adjustments and the only guide in all enterprise and speculation as to the future trend of practical affairs.

He asserts that the problem is one of "rightly distributed demand" rather than "greater aggregate demand" by which opinion he probably means a more general effective enquiry for wares. Seeing that individual capacity of consumption is strictly limited, I cannot conceive of a greater aggregate demand apart from a wider or larger number of consumers.

He seems to think that the Treasury has some means of controlling the distribution of purchasing power among workers for wages coupled with charity to idle men in distressed areas where employment has languished from the absence of national needs for their production!

One has to turn to his third letter to discover what he is driving at and the following passage throws some light upon his thesis, *viz.*; "Up to a point individual saving can allow an advantageous way of postponing consumption (at the expense of others?). But beyond that point it is for the community as a whole both an absurdity and a disaster." Thus what may be good for the individual in the way of withholding the use of his

surplus money, will become disastrous if generally adopted! Could any conclusion be a greater condemnation of our economic system when using permanent metal backed legal tender pro-notes to represent values by means of variable prices as fractions of a limited volume of an unrelated entity aided by the call-option of it on payment of annual tribute to the lender who has the legal power to recall it at his discretion or to demand additional collateral?

The Times leader of 14th January commenting upon these three letters, starts by saying that Mr. Keynes is not an alarmist so it would be better for him to seek for the cause of the present moderate prosperity from higher prices rather than to ask us to prevent it from developing into a precarious boom of speculative activity and reaction.

In conclusion this commentator asks those who differ from his suggested palliatives to put forward their alternatives and it is this appeal to commonsense and logical reason which prompts me to write this letter in India where perhaps a better perspective is obtainable than in the midst of financial devices and operations of all kinds which tend to cloud the issue.

I am glad to see that Mr. Keynes now considers that the imposition of dear money by raising the Bank rate is "playing with fire" and to avoid it as we would "hell fire" but what he means by "the long-term rate of interest must be kept continuously as near as possible to what we believe to be the long-term optimum" I do not know unless he refers to the yield on irredeemable Government debt such as consols.

Nor do I understand what he means by referring to a higher rate of interest being "not suitable to be used as a short-period weapon." All this economic financial jargon may be highly intellectual but it must befog the average lay mind.

If the market rate of interest or discount is to be kept low and steady, it must be within the power of the Treasury and the Bank of England to increase the supply of loanable funds; this necessary increase may be effected by the purchase of gold at market rates and its transfer to the Issue Department of the Bank at the old parity of 80/- per ounce by payment in new notes thus enlarging the basis of bank credit which carries the call-option of such notes from the Banking Department.

But how are these extra notes to be withdrawn if their issue tends to raise all prices from the increased supply of cheap bank-cash and the fear of War with its emergent expenses on defence measures. They cannot be converted into gold coins of the same denomination nor is the Bank under any obligation to part with

its reserves in the Issue Department even at the current market price in sterling. The only alternative seems to be the rationing of credit or advanced debits by the clearing banks in England coupled with the discount of approved bills of exchange which can be rediscounted in the open market; the banks will then get control of the position and prevent any undue speculation or rise in the market rate of interest and the Bank of England will keep its rate unchanged at 2 per cent as today.

The expressions "free economic system," "recurrent and non-recurrent investment" are unintelligible to me. It is just because our economic system is not free from the baneful influence of a limited supply of credit based upon a limited stock of currency which in its turn is built upon a limited coverage of gold in the Issue Department of the Bank, makes it inevitable that market prices and rates of interest must vary in order to attain some equilibrium between the supply of wares and the ability to pay for them if wanted.

The new system of buying gold at the market price with the proceeds of sale of some £350 millions of short-term Treasury Bills and the transfer of part of this gold to the Issue Department of the Bank at the old Mint parity leaving the difference or loss to fall upon the Exchange Equalisation Account in the books of the banking department, together with the substitution of securities in the currency reserve by gold thus acquired, introduces a complication which nobody seems to understand. It looks like rigging the market in secret with the object of reintroducing the gold standard at some lower parity which may enable the Treasury to recoup its loss on the Exchange Equalisation Account without any public accusation of inflating the currency. But so far it does not amount to any serious expansion of the issue of legal tender Banknotes which by the way are not legal tender to itself under its constitution so that it would be interesting to know how the Bank paid for the recent large addition to its Head Office building, presumably by orders on its head Cashier which pass as cheques through the clearing house. Its dividend warrants are of the same nature, they do not involve the use of cash unless demanded by the payee.

Mr. Keynes says that "the sole ultimate object of economic effort is that those who would benefit from increasing their consumption should have the power and the opportunity to do so. Nobody will dispute this *obiter dictum*, the problem is how to put it into effect under our existing monetary system which gives the command of wares and services to the owners of deposits in banks or holders of cash with the option of lending it at interest by

means of time deposits or so-called gilt-edged securities served by taxation on the whole community.

Money is not wealth and those who misuse it in this way because they are afraid to take the risk of losing it in joint-stock enterprise, prevent all those who have only their skill and labour to sell, from earning a decent livelihood thus swelling the ranks of the unemployed.

I venture to assert that it is beyond the range of " constructive imagination " to form any idea of what rate of interest the investing public will accept from loans to local authorities for public utilities such as Mr. Keynes suggests to fill the gap in investments when business is generally depressed. Such loans although served in part by local taxation and monopolies are usually underwritten by wealthy speculators who take this risk for a commission and are guided by the yield derived from similar established undertakings which have to support the burden of maintenance and sinking funds in addition to the rate of interest offered at time of public subscription by individuals and institutions seeking employment for their spare cash.

It would be better to finance such projects with new currency free of interest on the security of debentures redeemable by annual instalments when such addition to the country's medium of purchase would be withdrawn; to spend borrowed money is just as inflationary as the spending of newly created *ad hoc* short-term cash. Such redeemable debentures should rank higher than idle immobilized gold bars in the Issue Department of the Bank of England. They represent real value created from the " constructive imagination " of the nation's leading administrators, engineers and architects. It is impossible to control rates of international exchanges by means of a limited issue of Treasury Bills or Government credit served in the final resort by taxation however scientifically graded to spare the small man. Mr. Keynes must know this but he also knows that " The Times " would not publish any such revolutionary suggestions as contrary to the peace of mind of the monied classes whose will is paramount and all-powerful today.

THE DECLINE AND FALL OF THE GOLD STANDARD: WHAT NEXT?[1]

BY

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University of Dacca.

I

The Gold Standard in the Pre-war Period.

Gustav Cassel ranks among the half dozen leading economists who have played a prominent part in the post-war monetary reconstruction of the world. Like Keynes, Cassel, too, has done much to disturb the intellectual complacency of the present generation in regard to economic and currency questions. In clarity of vision, brilliance of logic, coherence of thought and cogency of style, he has few equals. In this his latest work, the Downfall of the Gold Standard, he gives us his own answer to the question—Should the world return to the international gold standard or should it go ahead with its various experiments in managed currency under the leadership of Great Britain? And at a time when the question is being seriously debated all the world over, Cassel's present book should receive a great welcome.

In the space of nine short chapters, Cassel beautifully narrates the brief history of the gold standard. Its rise, decline and fall approximately cover a period of six decades, 1870—1930. Obviously, it is not an ancient and venerable institution. But, the more relevant question is—Is it an efficient Institution? Can it work successfully in the radically altered economic environment of the post-war world? Cassel emphatically says, "No." And he has been driven to this conclusion by the power of a formidable array of facts and arguments. The almost universal acceptance of the gold standard was based on two assumptions: firstly, that the value of gold itself was sufficiently stable to make it serve as the best available standard for the measurement of the values of all national currencies; secondly, that a gold standard implied and ensured such a perfect automacy of the working of the currency mechanism that it would be both

[1] This essay is largely based on Gustav Cassel's book, The Downfall of the Gold Standard, Oxford, 1936, pp. 262, 6s. net.

fool-proof and knave-proof. But both these assumptions have been overthrown by the experience of the pre-war period and even more by that of the post-war period. As regards stability, Cassel shows that between 1873 and 1896, the value of gold in relation to commodities as measured by Sauerbeck's index numbers fluctuated by as much as 45 p.c. And these changes in the purchasing power of gold are explained by ups and downs, sometimes mild, sometimes more serious, in the supply and demand for gold. Nor was the supposed automacy of the gold standard and its freedom from management or political influences established by experience. The currency authorities always tampered with the working of the currency-price mechanism by means of gold-economising or gold-sterilising policy; the effects of gold movements were often counteracted by international borrowings and lendings; or to put the same thing in a different way, gold movements were often caused, not by disequilibrium between national price-structures as was supposed by the theory of the gold standard but by exports and imports of capital. Thus, the gold standard, even in the pre-war period, had neither the merit of automacy nor that of stability. It must also be held to account for two other harmful reactions on the economy of the world: First, the scramble for gold associated with the gold standard must be blamed for the advent of neo-mercantilism which had shown itself in growing tariffism; secondly, since it made it possible for the credit balance to be collected through gold imports, it often released the creditor countries from the obligation of international investment and thus slowed down the tempo of economic progress.

And, yet, in spite of these shortcomings, how was it that the gold standard functioned sufficiently well for the economic society so as not to raise any questionings? Professor Cassel's view is that the credit for such success as it achieved must be given to the management of the pound sterling, which really became the currency of international trade due to Britain's loyalty to the principles of free trade, her willingness to export capital on a large scale and her wise abstention from unnecessary hoarding of gold reserves, so that her currency authorities were the *de facto* governors of the international currency and credit system. But, we venture to add that the unbroken supremacy of the gold standard was also due, in no small measure, to the fact that this period of the rise of the gold standard coincided with a marvellous improvement in the material conditions of mankind promoted by the development of transport and communications, mechanisation of production, and political stability. Consequently, a truer

explanation of the unchallenged position of the gold standard in the pre-war period would perhaps be to say that a particularly fortunate conjuncture promoted progress to such an extent that it was not worth while to trouble about the flaws in the working of the gold standard.

II

The Post-war Experiment.

It is sufficiently well known how as a result of the deliberations of the Brussels Conference of 1920 and Genoa Conference of 1922, in both of which Cassel played a notable part, the gold standard was reconstituted on new principles and completely restored by 1928. Through his writings and speeches during this period, Cassel succeeded in clarifying the issues involved and in showing the way out of the chaos to some sort of order and stability in the domain of currency and exchange. It was during this period that his celebrated theory of the purchasing-power parity arose, which helped the world to get rid of much ancient superstition and thus avoid much unnecessary pain and suffering. First, Sweden and Germany in 1924, then Great Britain in 1925 followed by smaller nations, adopted the gold standard, and the process was completed by France's re-entry into the international currency system in 1928. This monetary reconstruction restored world-wide confidence and stability and served as an effective stimulant to the revival of international trade. But, scarcely had the international gold standard been restored than the process of disruption began. In the first place, the stabilisation of the French currency was immediately followed by the influx of French funds which had been so long kept abroad due to lack of certainty and confidence. The enforcement of the claims to reparations and war-debts caused a one-sided flow of gold into France and the U.S.A. The excess gold accumulations of these two countries were not allowed to flow back *via* international investments. And, both of them did all they could to cause an intolerable strain to the international system by putting up high barriers against the entry of foreign goods, the only way in which their claims could be met by the debtor countries. Finally, they refused to 'play the game' by allowing their prices to rise *pari passu* with the expansion of gold reserves, which had been one of the fundamental rules of the gold standard. On the other hand, continuous depletion of the gold reserves compelled the debtor countries to initiate a severe process of deflation which caused such a rapid and large fall of prices that in a short time

many important countries including Great Britain, as a measure of defence for the internal economic structure, abandoned the gold standard and resorted to what are called independent paper currencies.

III

The Two Schools of Thought.

Ever since the abandonment of the gold standard by England in September, 1931, two rival schools of thought have developed as regards the future of international currency. The fundamental cleavage between the two standpoints—the one Anglo-American and the other Continental—was first revealed in the majority and minority reports of the Gold Delegation to the League of Nations published in 1932 and became sharper and deeper in President Roosevelt's new currency policy inaugurated in 1933, the proceedings of the World Economic Conference held in London in June-July, 1933, in the series of remarkable articles by Messrs Keynes, Robbins, Rist, Henderson and Brand in the Lloyds Bank Monthly Review, 1935, two articles by Strakosch and Salter in the London Economist, January 5 and July 6 and 13, 1935, and finally in two articles on British Monetary Policy published by the London Economist, October 17 and 24, 1936. Cassel in the well documented chapters of his present book very successfully traces the origin and development of this cleavage between the two schools. He puts the rival theses to the decisive test of experience and advances solid reasons for the view that the Anglo-American Thesis is the right one or at any rate more right than the Continental one.

The British Thesis, supported also by the U.S.A., Sweden and a few other countries, briefly, is that the financial crisis and the economic depression of 1931—36 are largely a monetary phenomenon traceable to inherent flaws in the working of the gold standard; that it must be treated by monetary measures designed to raise the domestic price-levels so as to establish equilibrium between costs and prices and thus encourage normal investment and employment; that, as and when the necessary equilibrium has been achieved by different nations through nationally autonomous currency management, there should be a return to the international gold standard with fixed parities; and further, that so long as such internal equilibria have not been established, it would be unwise and even perilous to return to the gold standard. In other words, in the Anglo-American view, the restoration and maintenance of internal equilibrium should be regarded as the

primary objective of monetary policy, stability of exchange being relegated to a secondary and subordinate position. The Continental Thesis, as expounded mainly by France, is that the world economic crisis and the depression are due not so much to the inherent flaws of the gold standard as to the various maladjustments in the structure of world demand and world supply caused by the war-time and post-war inflation; that the depression has been aggravated by the competitive depreciation of independent paper currencies and the various trade restriction measures provoked thereby; and that the first and foremost objective of monetary reconstruction should be to stabilise the exchanges with fixed parities in terms of gold, it being presumed that the development of international trade promoted thereby would automatically help to raise the national price levels so as to restore a fair measure of internal equilibrium.

It is thus clear that the cleavage is a fundamental one. It is a cleavage that was anticipated by Keynes as early as 1923 when in Chapter IV of A Tract on Monetary Reform he examined the issue of Devaluation *vs.* Deflation and Stability of Prices *vs.* Stability of Exchange. A compromise between the two points of view was attempted during 1932—35, first, in the Note of Dissent by British and Belgian delegates to the Report of the Gold Delegation to the League of Nations, secondly, in the Hoover-MacDonald Statement of May, 1933, and later on in the articles, already referred to, by Strakosch and Salter. The substance of the compromise appears to be, first, an internal adjustment of prices and costs through devaluation and rise of prices, second, a period of experimental *de facto* stabilisation, and finally a permanent *de jure* stabilisation with fixed parities in terms of gold. And when in September-October, 1936, France and other countries of the gold bloc devalued their currencies and a gentlemen's agreement between the U.S.A., France and the U.K. was concluded with a view to avoiding unnecessary fluctuations of exchange, for a moment it appeared as if we had travelled a good long distance on the way back to the international gold standard.

IV

Cassel's Thesis: His Facts.

But Cassel in his present book finds clear traces of a fundamental and definite transformation in the world's monetary system, which involves 'nothing less than the final dethronement of gold from its position as the basis of the world's monetary system.'

With an unerring instinct for the things that are relevant and significant, he picks up and joins together the links in the chain of this radical development and presents the definitely challenging hypothesis that the gold standard has finally disappeared from the monetary organisation of the world. And his hypothesis rests unassailably on hard facts and hard logic.

Professor Cassel builds his case, first of all, on the basis of a series of important declarations and acts by American and British official and non-official spokesmen as to the objectives of monetary policy. Thus, the minority of the Gold Delegation to the League of Nations, in its Note of Dissent, plainly says that "the prime objective of monetary policy should be the stability in the general level of wholesale prices." (Report of the Gold Delegation, p. 67.) In the U.S.A., again, Part III of the Emergency Farm Mortgage Act of 1933 authorises the President to reduce the weight of the gold dollar up to 50 p.c. in order to "stabilize domestic prices or to protect the foreign commerce against the effect of depreciated foreign currencies." Moreover, by a Resolution of 5th June, 1933, the Congress abolished the gold clauses of all contracts, private as well as public, thereby authorising debtors to make final discharge of all contractual obligations in terms of legal tender. Furthermore, President Roosevelt declared on July 5, 1933, with special reference to the proceedings of the London Economic Conference then in session, that the "United States seeks the kind of a dollar which a generation hence will have the same purchasing and debt-paying power as the dollar value we hope to attain in the near future."

It is true that official pronouncements in the United Kingdom as regards the primary objectives of monetary policy have never been precise or clear beyond indicating that for the time being the aim of British policy is to raise prices so as to restore cost-price equilibrium and thereby promote investment and employment. There seems also to be a shadowy idea in the background that when an approximate internal equilibrium has been attained in the major countries of the world, the pound sterling would be finally linked to gold with fixed parities. On the other hand, non-official expert opinion seems to be definitely inclined to favour a permanence of the present monetary policy, relegating exchange stability to a secondary and subordinate place. Thus, Strakosch, in his now famous article on the "Road to Recovery" (Supplement to the London Economist, January 5, 1935), while ably arguing the case for an ultimate return to a rigid gold standard, insists on a stable cost-price equilibrium as the condition precedent to exchange stability. But, if this is the essential condition of

exchange stability, exchange stability must now and again make way for internal stability, because there is always an inherent conflict between the two. That being so, Strakosch, in spite of himself, establishes internal equilibrium as the prime objective of monetary policy. A great step forward in the same direction is taken by Salter in his article on "Conditional Stabilisation," published in the Economist of July 6 and 13, 1935. The British non-official point of view is further clarified by Keynes in his article on "The Future of the Foreign Exchanges" published in the Lloyd Bank Monthly, October, 1935, where he discusses at great length the method of approach to the problem of stabilisation and supports the case for experimental short-term stabilisation somewhat on the lines of Salter, but ends up with the statement that "we must retain an ultimate discretion to do whatever is required to relieve either a sudden and severe or a gradual and continuing strain, without laying ourselves open to any kind of reproach." And this statement is nothing short of a rejection of the gold standard as a final and permanent basis of the monetary system. And, finally, soon after the devaluation of the Franc and the announcement of the tripartite agreement between France, the U.S.A., and Britain, the London Economist in very definite and unambiguous terms formulated the British Monetary Policy in two articles (October 17 and 24, 1936), in the course of which, as in Keynes' article already cited, the project of tentative, experimental stabilisation is coupled with the *retention of the ultimate right of Great Britain to change the rate of exchange* in order to rectify major maladjustments which may be caused by changes in the terms of trade on account of trade cycles.

In Sweden, too, where monetary measures have been remarkably successful in remedying the depression, the primary objective of monetary management, as guided by Cassel and other leading economists, is "the maintenance of the internal purchasing power of the Swedish Krone as against commodities (Cassel, the Downfall of the Gold standard, p. 66)."

Since these official and expert non-official declarations and the actual policies followed in the U.S.A., the U.K., Sweden and other countries of the sterling bloc have defined the primary objective of monetary policy to be either the stability of the internal purchasing power of currency as against commodities or the stability of internal equilibrium, instead of fixed parities of national currencies in terms of gold, Cassel concludes that this change of objective *in effect* means the permanent abandonment of the gold standard.

V

Cassel's Thesis: His Logic.

But, it would be obviously unsafe to rest a permanent monetary policy on what may, after all, prove to be temporary and abnormal tendencies produced by extraordinary changes in the world's economic structure. Nor should it be ignored that the British Government, under the guidance of the Bank of England, and as evidenced in official declarations from time to time, still look forward to a not-too-far-off stabilisation of the exchanges in terms of gold. Consequently, Cassel advances a formidable array of arguments to establish the case for a permanent rejection of the gold standard even as a distant goal.

Now, those who advocate a return to the gold standard claim for gold three special functions without which it is suggested that the monetary mechanism of the world cannot run on smoothly and efficiently. These three functions are (1) to serve as a means of payment, (2) to act as a regulator of credit, and (3) to be a standard of value. Cassel shows that in practice gold has ceased to function in any of these capacities and has been taking on new functions instead. Firstly, both recent legislation and practice over the greater part of the world have effectively abolished the use of gold for internal payments. As regards the use of gold for ironing out discrepancies in the international balance of payments, it is generally found that modern gold movements are caused partly by demand for gold reserves and partly to finance the nervous flight of capital from country to country in search of liquidity, safety and profitability, and only to a small extent for meeting an adverse balance of international account on income items. Gold is also sometimes accumulated to serve as an emergency chest or as a source of political power. That gold reserves are not acquired primarily for the purpose of balancing current international account is further proved by the fact that in recent times, as on 31st July, 1934, the world actually held "gold reserves to an amount more than sufficient to pay a whole year's imports without any use of the corresponding exports" and by the fact that by far the most extraordinarily large gold reserves are held by foremost creditor countries like the U.S.A. and France and not by debtor countries. Turning to the function of gold as a regulator of credit, we find that, due to the serious maldistribution of gold in the post-war period, expansion and contraction of currency and credit *pari passu* with the increase or decrease of gold reserves would cause dangerous inflation in a few countries that have huge gold stocks and

intolerable deflation in those others which are short of gold. Moreover, as gold movements are now-a-days promoted to an extraordinary degree by large-scale and rapid transfers of capital to and fro, the use of gold reserves as a regulator of credit would produce the most disastrous effects on internal economic structures.

Consequently, one of the most characteristic features of recent monetary policy is to make currency and credit regulation entirely independent of gold reserves and to match gold-sterilisation in some countries by severe gold-economy in others. And, since the use of gold for internal payments is clearly extravagant and its payment for meeting debit balance in international account is of a comparatively small order of magnitude, there can be little sense in re-adopting the practice of regulating credit on the basis of gold reserves. On the contrary, if the fruitful lessons of managed currency in recent years are not to be lost, it would be wise for the world to continue the present practice of regulating credit quite independently of gold. And, finally, in regard to the function of gold as a standard of value, it is well for us to remember, first of all, that unless there is a fixed, invariable parity between a unit of gold and a unit of each national currency or a unit of any specific good or group of goods, it breaks down as a standard of value. And this is exactly what happened to a considerable extent in the pre-war period and, again, to a marked degree, in the post-war years. The repeated alterations of the gold parities of the leading currencies of the world during the last twelve years and the frequent assertion of the right of such alterations in future in case of need should sufficiently indicate the fact that gold is no longer regarded as a reliable standard of value. And what is more significant, even the advocates of a return to the gold standard insist that it should be reconstructed in such a manner as to ensure stability of the value of gold itself. Now, once we define the objective of monetary policy to be to ensure stability of the value of gold itself, we are driven to the conclusion that there must be some other external objective standard of measurement like, say, the general index of wholesale prices, in terms of which the stability or instability of the value of gold itself has to be measured. And this means that 'this some other objective standard' or say, 'the commodity price level' will have become our ultimate standard of value and not gold which itself has to be measured in terms of that other standard.

If, then, gold has been actually abandoned in law and practice, and if, further, it has failed and must fail substantially as a means of payment, as a regulator of credit, and as a standard

of value, is it entitled in any manner, pertinently asks Cassel, to be re-established as the sovereign ruler of the monetary system of the world?

VI

What Next?

Now, if the gold standard is to be abandoned for ever as a complete failure, what are we to have as a substitute by way of international currency? It seems that there is here a fundamental difference in outlook between Cassel and Keynes. Cassel holds that after the national price levels have been sufficiently raised so as to be in equilibrium with costs, the currencies of the sterling bloc should remain linked with the pound sterling with fixed parities, such parities being arrived at by the application of the principle of purchasing-power parity. Keynes, on the other hand (Lloyds Bank Monthly, October, 1935), rejects the purchasing power parity theory as useless for the purpose of arriving at equilibrium rates of exchange, would get at such equilibrium rates by a process of trial and error and in the light of gold movements, movement of costs, level of employment and tariff barriers in various countries, would maintain this provisional rate of exchange as long as possible, but would retain the ultimate freedom to abandon this rate in favour of a new one if the existing rate causes undue strain to the equilibrium of the internal economic structure.

Which would be the more appropriate policy? First, as regards procedure: Since Cassel's purchasing power parity theory cannot be applied unless we can fix upon a basic equilibrium period and unless the terms of trade have remained substantially unaltered, between the basic period and the present one, it seems that, in the radically altered structure of world demand and supply that has come about in the last two decades, the underlying assumptions of Cassel's theory do not hold good and therefore the theory does not apply. Given the fact that the terms of trade, as now, are subject to wide fluctuations due to trade restrictions, policies of autarchy and exchange control, and divergent movements of costs in different countries, the best practicable way of arriving at something approaching an equilibrium rate of exchange would be to adopt a process of trial and error in the light of such general factors as the volume of employment, tariff levels and gold movements, as suggested by Keynes. It is true that such a procedure cannot give us a mathematically precise and definite conclusion as regards the equilibrium rate of

exchange. But it would be worse than useless to endeavour to adopt a mathematical formula when all the terms of exchange equation are constantly changing. Moreover, if the stable equilibrium of the internal economic structure is to be the main objective, on which both Keynes and Cassel are agreed, we must be prepared for an alteration of exchange rates whenever the divergent requirements of different economic structures demand it. If, for instance, after a parity has been at work for some time, it is found that British costs are moving higher than, say, Swedish costs, so that the British price level, too, has to be pushed up in proportion, does it not follow that the equilibrium rate of exchange between Great Britain and Sweden will have been altered, too? A similar situation may also arise when there are changes in the terms of trade between the two countries due to other non-monetary factors such as technical progress or movements of capital. Cassel is, of course, right in insisting that the linking up of national currencies with a well-managed currency like the pound sterling would be a more sensible policy than linking them up with gold, which has behaved so erratically in recent decades with such disastrous consequences to world economy. But, if in the face of rapidly changing and vastly altered economic and political conditions of to-day, flexibility and elasticity should be the essence of national currency policies, such currency policies should also connote a certain degree of flexibility and elasticity in the rates of exchange as well. Consequently, it would appear that the best objective of monetary policy under present-day circumstances would be to have a flexible internal price-level accompanied by a flexible rate of exchange, with only such fairly long periods of stability in both as we may, with some skill and good luck, manage to have.

REVIEWS OF BOOKS

GRAM SUDHAR (Village Improvement in Hindi) *by* PANDIT GANGA PRASAD Pandey, L. Ag., Superintendent Department of Agriculture, U.P., and Pandit Ramesh Chandra Pandey, M.A.; Published by Krishi Karyalaya, Jaunpur, U.P.; Pp. 196; Price Rupee one only.

The authors of this book combine in themselves both theoretical knowledge and practical experience of agricultural improvements. Pandit Ganga Prasad Pandey has been a superintendent of various Government Agricultural Farms in U.P. for a number of years and has thus acquired good practical knowledge of improved methods of Agriculture. Pandit Ramesh Chandra Pandey was one of the best students of Allahabad University and has sound theoretical knowledge of the various aspects of the problem. The book under review contains ample evidence of the proper use of their knowledge. It has been written in a simple language and can be easily understood even by village people. The following problems have been fairly well discussed in this book:—

Duties of the people of rural areas, Village panchayat, Improvement and proper care of cattle, Cow-dung pits, Improved methods of cultivation, Village industries, Marketing of agricultural produce, Cooperative action, Cooperative societies, Rural education, Sanitation of villages, Village service, etc.

In a country where 90 per cent of people live in villages and where the condition of the village people is undoubtedly very unsatisfactory from an economic point of view, the importance of a book which shows clearly in a practical way the real lines of improvement cannot be overestimated. I strongly recommend this book to all those who are interested in the problems of village improvement in India.

DAYA SHANKAR DUBEY

ECONOMIC THOUGHT AND ITS INSTITUTIONAL BACKGROUND *by* HARVEY W. PECK. GEORGE ALLEN & UNWIN. 1935. Pp. 379. Price 12 s. 6 d. net.

The book is divided into fourteen chapters. They are—The Factors in Economic Analysis—The Political Background of Economic Theory—The Canonist Doctrine—Mercantilism—Physiocracy—Early Classicism—Later Classicism—Marginism and Pecuniary Analysis—The Newer Capitalism—Economic Theory and Economic History—Welfare Economics—Institutional Economics—Collectivism—Summary.

These chapters are followed by a bibliography—an appendix containing questions for economic analysis and index.

The book explains how different types of economic theory came into existence. It is not meant 'to give a complete exposition of historical economic theories, but to review the history of economic thought in order to secure materials for a reconstructive synthesis of economic theories.'

(P. 260.). This synthesis the author finds in the fact that economic theories arose 'out of the combination of economic factors and their relative values and men's reflection on them.' They were generalizations from or rationalizations of economic, historic or secular trends. At different times a new factor emerged into prominence. Its development offered great economic potentialities till it grew to the optimum size according to all the potentialities of the situation. This gave an economic, historic or secular trend and a parallel trend in the development of economic thought which was precipitated as a specific school of economic thought. The class of people that offered and developed the new factor held the key situations and became what Professor Giddings calls the 'protarchy'. The different types of economic theory became thus rationalizations by or for this dominant elass. 'Thus the Canonist Doctrine was a theorizing of the clerical attitude toward economic problems. Mercantilism was a rationalization of the attitude of the merchants and the absolute monarch. Physiocracy was the theorizing of the agrarian reformers. Classicism and Marginism were theorizings of or in the spirit of the industrialist. The Newer Capitalism is a rationalization of large-scale industry. Welfare economics is a search for an ideal economic institution by scholars and artists. . . . Collectivism might be called a rationalization of the attitude of labour, the wage-earning classes.' (P. 326.)

Thus it is clear that 'Economic Thought has had something of an orderly development, that it has not been merely the product of speculation by various independent thinkers.' (P. 364.)

The author concludes as to the past and the present in the following words:—'The result of this historic review is to justify and approve historically, that is, on the relativistic approach, of all the historic schools of economic thought, both as interpretations of the times and as contributions to a permanently valuable body of economic generalizations. As to the present conditions, however, the analysis leans to a preference for an economic outlook compounded of welfare, institutionalist and collectivist elements rather than of classical, marginist and newer capitalism elements.' (P. 367.)

The book is one of the best we have come across. It holds one alike by its penetrating and thought-provoking analysis and method of approach and interpretation. We would recommend it for study to students of economics in general and to students of economic thought and economic history in particular.

G. D. K.

ELEMENTARY PRINCIPLES OF ECONOMICS *by* Prem Chand. Oxford University Press. 1936. Pp. 290. Price Rs. 1-8.

This book is a welcome addition to the literature on Economics in Urdu. The number of books that exist in that vernacular of the country is very meagre and those of them that deal with the principles of Economics are rather voluminous and costly. But Prof. Prem Chand's book is free from these drawbacks. It has only 290 pages and is priced at Rs. 1-8. These alone, however, would not entitle it to a welcome if there were

other defects in it. But there have not appeared to us any worth mentioning. On the contrary it has some other merits, besides small bulk and low price. It is written in simple Urdu and explains the elementary principles of Economics in a lucid way. The equivalents used for Economic terms are very appropriate; and not cumbersome and a glossary of them is given at the end of the book. The book contains a number of black-and-white plates which should be appreciated. The get-up is very good.

The book is divided in six chapters. They are:—Introductory—Consumption—Production—Value—Distribution—Money.

We can strongly recommend the book for study.

G. D. K.

THE ECONOMIC DEVELOPMENT OF INDIA, *by* VERA ANSTEY. Longmans. 1936. Pp. 582. Price 25/- net.

This is the revised and enlarged edition of Vera Anstey's famous work, The Economic Development of India, which was first published in 1929 and traced the economic development of India till practically the year of its publication. Between then and the current year there is an interval of about seven years. This interval has witnessed considerable change in the economic sphere in the country. What has happened since 1929 needed to be told and the work brought up-to-date. The author does that in the present edition.

The chief event of the years that have elapsed since the first publication of the work was the world economic depression which started in 1929 and lasted for about five years. It had far-reaching repercussions on economic activity, policy and situation in India. The story of the years 1929 to 1936 is mainly the story of those repercussions. Mrs. Anstey relates the story in as great detail as possible in a new chapter—Chapter XVIII of the present edition. She also adds a paragraph or two at the end of some of the other chapters with a view to bringing the subject-matter of those chapters up-to-date. The work is thus up-to-date.

The Chapter XVIII of the work is headed Economic Development since 1929 and is divided into two sections. The first section discusses the effects of the depression under the heads: foreign trade; internal trade; transport and production; the financial situation and policy; commercial policy; banking and currency; the condition of the people. The second section deals with the financial and economic aspects of the new constitution.

The work is certainly the best that exists on the subject. Alike as a text-book and a work of reference its value is unique.

G. D. K.

INTRODUCTION TO ECONOMICS, *by* G. B. JATHAR and S. G. BERI. Oxford University Press. 1936. Pp. 595. Price Rs. 4-8-0.

This book is intended to be 'a complete course for Intermediate, B.A. (Pass) and Commerce students,—as well as the examinations of the Indian and London Institute of Bankers.' There is no doubt that the book contains sufficient, we should say more than sufficient, material for those going up for Intermediate and equivalent examinations and that students preparing for degree examination will derive great benefit from its study. But we do not think that it is suitable for adoption as a text-book for that examination—in some Universities at any rate. It is, as the authors have named it, an introduction to Economics. As such it is one of the best books that have been published. It is based on Marshall who is followed in teaching Economics in Indian Universities. It is complete in itself: it deals with all the topics that students have got to study for examination purposes. The principles of economics discussed are illustrated as far as possible by examples from India. Indian economic conditions and problems are further presented in a separate part. There is a large number of maps, schedules and diagrams which help to understand easily the matters to which they have reference. And finally typical questions are given on each chapter the summary of whose contents is noted at its end.

The contents of the book may be noted so that a clear idea may be formed of its comprehensiveness. It is divided into two parts. Part I is headed Elementary Principles of Economics and in eighteen chapters deals with the scope and methods of Economics, landmarks in economic development, some fundamental concepts of Economics, Consumption, Production Value and Exchange: Money, Banking and International Trade, Distribution, Public Finance and Unemployment and Trade Cycles. An appendix is added at the end of the Part and discusses the trade and products of the principal countries of the world. Part II is entitled Elements of Indian Economics and is divided in eight chapters which concern themselves with the resources and population of India, economic transition in India, agriculture, industrial development, trade and transport, currency, prices and banking, finance and national income and unemployment. This part is also finished with an appendix which gives an idea of the urban and rural administration and finance.

The book is well written and well arranged. Students as well as laymen wishing to have a working knowledge of economic principles and Indian economic topics can study it with advantage. We welcome it. There was a great need for such a comprehensive book. We can safely recommend it as a text-book for Intermediate course in Economics, and to the B.A. students to get a basic idea of economic principles.

G. D. K.

THE HINDU JAJMANI SYSTEM, *by* W. H. WISER. Lucknow Publishing House, Lucknow. 1936. Pp. 192.

This book breaks new ground in regard to the study of the Indian village community. The studies that have thus far appeared concerning that community had related to the blood-relationship or land-tenure rights of the village folk or to their castes or economic conditions. The social inter-relationship of the community had remained unexplored by the scholars although some reference to it is sometimes come across in their works. Dr. Wiser has been the first to study this aspect of the life of the village community. While engaged in Christian rural social service, he remained in contact with the Hindu village of Karimpur in the United Provinces for five camping seasons during the period 1925—1931. There he heard for the first time the terms *Jajman* and *Jajmani Haqq* which he later discovered referred to an established service relationship system which he has termed the Hindu Jajmani System. With the help of two youngmen of the village he studied the System and the results of the study he presents to us in the present book.

The study is an excellent study indeed. It appeals not only because it is the first of its kind but also because it is thorough and unbiased. Dr. Wiser views the Jajmani System from practically every point of view. He describes its structure, its functioning, the compensations and rights it involves, the factors that are leading to its disintegration and its advantages and disadvantages. Having done this he attempts an evaluation of the system as a service relationship in a rural community of today.

Dr. Wiser defines the Hindu Jajmani System 'as the system of interrelatedness in service within the Hindu community'. The community is composed of a number of castes. Each caste has a form of service to perform for the others. In this way all the castes in the village are interrelated in service capacity. Those who receive the service are known as the "Jajmans" of those who render the service; and those who render the service are called the "Kam-wále" or "Kam-karne-wále" (workers) of those whom they serve if they belong to the sudra or lower castes and by their caste title if they are of the upper castes. The whole clientele of the workers is termed their "Jajmani" or *brit*."

The services rendered are paid for "in cash and in kind" daily, monthly, bi-yearly, per piece of work, and on special occasions, depending on the type of service rendered and in part on the goodwill of the Jajman, as well as in various "concessions granted to the various occupational groups."

This is what the Hindu Jajmani System is and how the services rendered under it are compensated. The system has its sanction in the Hindu religious laws and has been further strengthened by being recognized by the English law-courts in India. But factors are at work that are bringing about its disruption. It will unnecessarily lengthen this review if we note these and what the author says about the advantages and disadvantages of the system as well as about its value to the village community of today. His views on all these topics are analytic and very valuable. Those who care to know them should go through the pages of the book.

The book it must be clear has a limited scope. It is the study of the Jajmani System as seen in one village only. Similar studies need to be undertaken with regard to other parts of the country for the system the author believes and we believe too prevails practically throughout the length and breadth of the country in one form or another. Then it will become possible to have a comprehensive and real view of the System in all its bearings. Dr. Wiser's book affords an excellent model for the conduct of such studies by others. He deserves to be congratulated on his painstaking, clear and scientific analysis of the System as found in the village of Karimpur.

G. D. K.

PROVINCIAL AUTONOMY, *by* K. T. SHAH. The National Publications Society, Series No. 1. Bombay. 1937. Pp. 444 + 7. Price Rs. 1-8.

This is the first volume in a series planned by the National Publications Society, under the editorship of Pandit Jawahar Lal Nehru, Acharya Narendra Dev and Prof. K. T. Shah. "The central and ultimate aim of the Society is to strive for a social system in this country which would have all the means of producing, distributing and exchanging material wealth socialised. To accomplish this objective, the Society seeks to educate public opinion by means of these Monographs, so that, if and when the desired goal is reached, it would be reached by peaceful, non-violent means, and would, at the same time, be more substantial and deep-rooted than social innovations born of revolutions usually are."

Prof. K. T. Shah occupies a very high position among writers on the economic and political problems of India. On "Provincial Autonomy" he brings to bear all his powers of searching analysis, acute criticism and lucid exposition. But he labours under a very serious handicap. The book saw the light in February 1937; the preface had been written on January 25, 1937; while the dedication is dated August 28, 1936. Presumably, the volume was completed before the end of 1936, that is, before the last general elections in the provinces and long before the Congress came into power in six provinces. A writer who expounds a constitution prior to its enforcement is driven to an estimate of possibilities and probabilities. He ventures on forecasts but nothing is more dangerous in politics than prophecy. For instance, an examination of the Governor's powers and functions leads Prof. Shah to the conclusion that "substantially the most important part of the executive work is removed from the sphere of the Governor's Constitutional Advisors. Even as regards the legislative work, effective powers of initiative and control are reserved to the Governor, ... From the moment of its being summoned to its dissolution, the Governor dominates the Legislature by his powers of initiation, direction and regulating procedure. . . . . . . The Governor is thus not merely the ornamental chief of the Government; he is also its effective controlling and dominating head" (pp. 94-95). For such a forecast there was some warrant in the Government of India Act, 1935. Yet it does not read like a description of the provincial governments to-day. The fact is that the actual operation of an instrument of government depends on a multitude of factors whose interaction

none can foresee. When the time comes for a second edition of 'Provincial Autonomy," the author, let us hope, will broaden its basis to include the experience gained in the meanwhile.

In spite of the initial handicap, however, Prof. Shah has produced a book well worth study. It opens with a clear and comprehensive description of the provinces, followed by a general view of Provincial Government under the new constitution. The greater part of the book is devoted to an analysis and criticism of the clauses of the Government of India bearing on Provincial Legislatures, Executives and Administrative machinery. Provincial Finance claims a long chapter (Chapter VII), while a short concluding chapter is devoted to Judicial Administration. Tables of statistics are given wherever necessary.

Wherever Prof. Shah undertakes analysis, he carries it out in an exhaustive manner. It imparts to the book the value of a work of reference. But the criticism which runs through the book errs by undue emphasis on the letter of the law. It fails to take sufficient account of the principles of responsible government and the force of public opinion.

A few slips and misprints are noticeable. For instance, 1936 has become 1956 in the table on p. 37. Sindh is spelt sometimes with and sometimes without h.

BENI PRASAD.

THE THEORY OF GOLD SUPPLY, *by* W. J. BUSSCHAU, D. PHIL. (Oxford University Press.) 1936. Pp. 193. Price 10s. 6d.

The Theory of Gold Supply is a part of the doctoral dessertation submitted to the Oxford University by Dr. W. J. Busschau. In his "Acknowledgements" he tells us that the portion which is not included in the present work 'deals with the future of the demand for gold'. 'In this volume he has used a special knowledge of South African conditions of investment as applied to gold mining.' Thus, the subject-matter is distinctly of practical interest; it has very little to do with theorising. In "Introduction" the author makes this clear by saying that 'all the problems of choice of monetary policy lie outside the scope of this book, which can best be described as an essay in Applied Economcis'. It is concerned mainly with three questions, viz.

'(*a*) What factors determine the rate of gold output in tons of ore?'

'(*b*) What factors determine grade?' and

'(*c*) How does Government intervention in the form of taxation etc., influence grade and scale of operation?'

In brief, what mining policy is the most desirable?

Dr. Busschau notes in passing that the masters of economics have paid scant attention to mining-economics. To us this seems natural, for two reasons. In the first place, mining is an industry which does not possess the same economic importance for *all* countries; some other industry or industries may be weighing heavier in their economic scales. As for instance, in the U.S.A., mining is an important industry, but it

seems that the Railway-industry is considered as affecting the country more intimately than mining. This way we can explain why in the field of applied economics the American economists have devoted attention to developing Railway-economics rather than mining-economics. In India also, mining in general and gold-mining in particular is comparatively less important than certain other industries. In the second place, mining-economics, being part of Applied Economics, falls, we think, outside of what Dr. Busschau terms 'bulky text-books,' whose principal aim is, or ought to be, to clarify the fundamental principles of Economics. Problems in Applied Economics come in for the purpose of illustration only. The text-books therefore seem justified if they abstain from entering into all the technical details of the various complex problems of Applied Economics.

In Chapter II, the valuation of mining property is considered. Into mining industry the element of speculation enters to a greater extent than in other industries; in it there are risks which are more or less incalculable. Yet vast amount of capital is found invested in it; because, speculative income has a sort of natural attraction for many. A. C. Pigou says that "up to a point people will gamble because they like excitement, even though they know that, on the whole, they are likely to lose money."

In Chapter III, the same topic is continued but considered mathematically. Two methods of valuing mining income are explained in their simple forms:—one, the Compound Interest Actuarial Method and the other, the Hoskold Method. The speculative rate of interest is derived by either of the two methods and therewith, the present value of all future incomes is determined. This present value is the amount of capital employed by the investor. Ultimately it is found to be the function of three factors, 'the safety factor,' 'the risk factor' and 'the time factor.' Then the author considers the difficulties of capital expenditure and in that connection the operation of the Law of Diminishing Returns is briefly analysed, which in its turn necessitates the analysis of the working costs per ton. The working costs include costs of labour,—and in South Africa labour is mostly black labour. The statistical figures quoted by Dr. Busschau in this respect are highly interesting. On p. 44, in note 1, figures of 'Proportional Ton-Labour' are given as undermentioned.

Number of white and coloured employees in service per 1000 tons treated per year

Years	White	Coloured	Total
1912	0·90	7·34	8·24
1917	0·81	6·63	7·44
1922	0 69	7·14	7·83
1927	0·70	6·32	7·02
1932	0·66	C·20	6·86

In the year 1912 coloured labour numbered more than eight (8·15 to be exact) times white labour; and in 1932 it was more than nine (9·39 to be exact) times. Speaking in percentages, in 1912 white labour

was 10·9 % and black 89·1 %; in 1932 the percentages were 9·6 and 90·4 respectively. Now look to the wages received by them. The author gives the working cost for the year 1933 as under (p. 44)—

		£ Millions	Percentage
Salaries & wages	White	8·7	27·8
	Black	7·2	23·0
Total of labour costs		15·9	50·8

From these two sets of figures, we can deduce the ratio of per head income for white and black labour. It must be, simply $\frac{7·2}{9·6} : \frac{8·7}{90·4}$ (taking the 1932 percentages for white and black labour), or in other words (or figures) white labour per head carries off 88·7 % leaving only 11·3 % for his coloured co-worker. A white labourer is paid an average wage which is nearly nine times that of a black labourer, while white labour is only $\frac{1}{10}$ and black $\frac{9}{10}$ths of the total labour employed!

In Chapter IV, the rate of gold production is sought to be determined. Two processes are employed. First, the Hoskold formula is requisitioned into service; but the result is not quite satisfactory, and the author leaves 'the shifting quicksands of this marginal method of analysis' soon enough and attempts the exploration of the more solid grounds on which mining experts stand. On theoretical grounds, mathematical and non-mathematical, it seems that to work plants to maximum capacity is the policy that pays best and that consequently 'the most economical rate of exploiting an ore deposit is the maximal rate' (p. 76). But investors are generally disinclined to follow this policy because they prefer security of investment to rapidity of extraction.

'The Determination of the Grades of Ore Worked' is the topic of Chap. V. Here also the marginal method is applied. 'Grade' is defined on page 54 and the analysis of the factors determining the grade is very lucid and interesting. The conclusion reached, however, is rather discouraging, because, it is declared that 'any general statement as to what becomes the average profitable grade is impossible' and that the actual figures,—given in reports and speeches,—of the average grade milled by the industry is 'a mere statistical abstraction.' We agree.

Chapter VI treats of the influence of taxation on grade and Chapter VII summarises the history of South African Income Taxation in recent times. The object of taxation, according to the White Paper of May 30, 1933, is to give every encouragement to the reduction of the grade of ore mined and to the development of existing and new mining properties (p. 129). The policy seems sound in principle; but in practice the Gold-mine owners do not appear to have found it satisfactory. Their chief complaint is that gold-mining is singled out for special taxation and that Gold-mining income is taxed at a greater rate than other incomes. Dr. Holloway is referred to (p. 145) as pointing out that there is 'no special case for the differential treatment of marginal gold producers, different from that applied to other marginal producers,' in general and

marginal producers of other extractive industries in particular. It seems that the Government-Psychology is the same everywhere: the industries which are considered the most important are taxed more heavily—burden of taxation varies directly as importance! We have got a parallel instance of Agricultural industry in India. It is given a differential treatment and has to bear a comparatively heavier burden.

The significance of South African Gold-mining Industry is brought out by the figures given in *Appendix I.* In 1935, the world gold-production was 30,500,000 fine ounces, to which South Africa contributed 10,774,000 ounces. The next greatest contributor is U.S.S.R. whose production comes up to 5,650,000 ounces. The Report of the Union Corporation for 1935, however, 'takes seriously the claim that by the end of the present year, the Russian output will be at the rate of ten or even eleven million ounces per annum.' (*The Economic Journal*, Sept. 1936, p. 413.) This is astounding development.

Finally three mistakes may be pointed out. In note 1, an annuity formula is given; in line 3 from bottom, instead of $j=5$ per cent, it ought to be $i=5$ per cent. This is a misprint.

On p. 28, line 4, $V=\Sigma(S_1+S_2+S_3+\ ..+S_n)$.

Here Σ is unnecessary; the equation should be either $V=\Sigma\ S_1$ or $V=S_1+S_2+S_3+\ldots\ldots+S_n$. Therefore, Σ in the next line is also unnecessary.

On page 86, line 17. Instead of saying that 'the grade is a function of capital outlay,' it is better to say that 'the profitableness of the grade is a function of capital outlay'; otherwise the statement is logically and mathematically inaccurate.

H. B. B.

PUBLIC FINANCE, *by* Prof. K. K. SHARMA. The Bangalore Printing and Publishing Co., 1937. Pp. 313. Price Rs. 3.

The book under review is at many places a summary of Public Finance by Shirras. We would have liked the author to make this confession in the Preface to his book. The students of economics would have had more respect for the book if the author had attempted to give them his own views on the various topics which he discusses. As it is, the book lacks originality of every kind.

The book is divided into two sections. The first contains the explanation of elementary principles of public finance, while the second deals with the history of Indian Finance with special reference to recent constitutional changes.

The principles of public finance as stated in the first part of the book call for some comments.

While discussing the theory of incidence of import duties Prof. Sharma writes, "If the article cannot be produced at home, the price will rise as a result of the imposition of the tax, partly because of the tax itself and partly because of the reduced supplies from abroad."

In reality, the price rises only because the (foreign) supply of the commodity is reduced. The imposition of the tax would not alter the price at all were the supply to remain unchanged.

On the same page we find, "If the commodity is produced under increasing returns, the larger sales of the home producers may permit of a reduction in price." As a matter of fact increasing returns and competition are incompatible facts. It would have been better if the attention of the reader had been drawn to that point.

A little later we are told that if a small tax is imposed on the output, "the more profitable concerns may decide to bear it themselves, when the marginal firms will go out of business." This however is most unlikely. The superior concerns can pay the tax only by lowering their selling price correspondingly. But if they can do so there is no reason why they should wait for the levy of the tax to make them do so. It would have paid them to undercut their rivals even before the tax was imposed.

Again, we are told that the price may rise as a result of a tax on profit. If the term profit is used in the sense in which it should be used the tax can never raise the price. This fact is however admitted by the author while dealing with the case of monopoly.

The four canons of public expenditure, namely, those of Benefit, Economy, Sanction, and Surplus are not mutually exclusive. The classification of expenditure into Primary and Secondary too is vague and unscientific (as the reviewer has shown in his book on The Nature, Classifications and Principles of Public Revenue and Expenditure). But the author can safely shift the blame on to his unacknowledged master Shirras.

It is mentioned in connection with internal and external loans that "In the case of external debts a part of the income of the debtor country has to be transferred to the creditor country in payment of interest or principal, which reduces the net income of the debtor country." This however is only one side of the picture and, in the opinion of the reviewer, the less important. For, in the case of an external loan there is the countervailing advantage secured through the use of foreigner's money. In the case of an internal loan the money comes from a source that would have supplied capital to other profitable private projects (unless, of course, there is an excess of saving over investment). Political considerations apart, it is the wisest economic policy to borrow in the cheapest market, be it foreign or home.

We find a similar fallacy a couple of pages later. "The indirect burden of an external debt arises because of the check to the productive power of the debtor community caused by the taxation required to meet the debt charges . . . ." Is it not strange that productive power should suffer when money is extracted for the payment of interest, but should remain in tact when much more money is extracted by way of subscription to an internal loan? We may repeat that the only criterion is the rate of interest.

We do not agree with the author that the repayment of a public debt necessarily lightens the burden on people. In many cases it may be more desirable to increase the volume of public debt. What is true in

the case of private finance is, notoriously, not true in the case of public finance.

Because of the fact that the book is a kind of a summary of the much more authoritative work of Principal G. F. Shirras, specially as far as principles go, it is likely to find favour with students. We however wish that Prof. Sharma may now give us a book which may acquaint us with his own views on the various problems of public finance.

J. K. MEHTA.

LIGHT ON THE CONDITION OF UNTOUCHABLES

"The Untouchable Classes of Maharashtra," *by* Mr. M. G. BHAGAT, M.A. Reprint from the Journal of the University of Bombay. Vol. IV, Part I, July, 1935.

The amelioration of the social and economic condition of the depressed classes in India is one of the outstanding problems that confront the reformer to-day. The problem is many-sided and complicated, having its religious, social and economic aspects. No measures intended to bring about the uplift of these classes, are likely to succeed unless they are based upon a full and correct appreciation of the facts of their lives. The worst features of the condition of the poverty-stricken and illiterate masses of India are, of course, present in their case in an accentuated form. But over and above this, there are special handicaps which thwart their improvement. The depressed classes are themselves split up into castes and subcastes which may not intermarry or interdine. Further, different parts of the country present peculiarities which have to be taken into account in devising remedies for the ills from which they are found to suffer.

Detailed and careful studies of the condition of the depressed classes will, therefore, prove very useful in the framing of the programmes for improvement. The investigation made by Mr. Bhagat into the social and economic position of a number of families of the untouchables in Maharashtra, throws instructive light upon the lives of these people and his conclusions and suggestions are interesting and are calculated to be helpful. He collected information about six hundred families and has tabulated it under different important headings. Births and deaths, marriages, literacy, size of families, indebtedness, incomes are topics statistically dealt with. And it is interesting to find that variations in all these respects are to be found in the different districts and among the different subsections. It is curious to note that the average size of the family is comparatively very large being as much as 9 in certain cases. Then again, the average indebtedness among some of the groups is very low while it is particularly high among certain others. These peculiarities can, of course, be accounted for on the ground of special features relating to occupations open to the people concerned. The statistics of incomes are revealing and show how most of the families of untouchables live wretched lives. Mr. Bhagat has given a list of their disabilities and grievances, and these are many, and has also indicated the manner in which an effort can be made to meet them.

V. G. K.

"INDIAN CIVIL SERVICE" by NARESH CHANDRA ROY, M.A., Professor, City College, Calcutta. Published by Book Company Ltd., Calcutta, 1935, price Rs. 2-8-0.

Professor Roy has brought out a useful book of about 300 pages dealing with many of the problems connected with the Indian Civil Service. He begins by describing the circumstances in which this illustrious service was created and goes on to show as to how it became the governing corporation in the country. He sketches the changes made from time to time in the organisation of the service, its methods of recruitment and the salaries and other emoluments paid to its members. He discusses dispassionately the question as to whether administration of justice (more particularly, Civil justice) by the members of the I.C.S. could ever be efficient and also as to whether it is right to make such a sharp distinction between the I.C.S. and the P.C.S. as is actually done. He deals comprehensively with the problems of the Indianisation of the service and of communal representation therein both from the historical as well as the practical standpoints of today. He has carefully analysed the constitutional position of the I.C.S. particularly as it has been affected by the inauguration of a system of constitutional government in the provinces. In short he has dealt with all those aspects of the problem of the Indian Civil Service which interest Indians at the present time and his conclusions are generally sound.

Professor Roy has not discussed in any detail the achievements of the Indian Civil Service as has been done by the Anglo-Indian writers on the subject; nor has he laid any emphasis on the opportunities still open to Englishman of doing distinguished work in the service, as he was not interested in persuading young Englishman to sit for the I.C.S examination. On the other hand he has fully recognised the valuable work done by members of the service and the high standard of honesty and efficiency set by them. However, Professor Roy has been anxious to point out that conditions in India have entirely changed and the Civil Service have to be reorganised on a new footing altogether and a number of adjustments must be made by the members of the I.C.S. The I.C.S. officers have not shown a spirit of sacrifice which is called for owing to the new developments in the government of the country. On the other hand they have displayed strong monopolistic and grasping spirit and greediness during recent years. Instead of recognising that the changed conditions required them to forgo certain high offices and positions they have put forward claims for even more posts—those which were not open to them before such as Chief-justiceships and Governorships. I wish Professor Roy had discussed the problem of the I.C.S. Governors in self-governing provinces. It has escaped his attention. He has also not discussed the question of the separation of the executive and judicial functions in this connection. Moreover the arrangement of his material in chapters and their order is not very satisfactory and it is for this reason that the reader does not get a clear and a logical picture of the problem as a whole—the position of the I.C.S. in the government of the country; its work and achievements; the problems introduced by the ambition of the people to become masters in their own home; and the future of the I.C.S.

GURMUKH N. SINGH.

Economic Development of the Mysore State *by* Professor V. L. D'Souza, Professor of Economics, Mysore University. Pp. 49. Price As. 8.

Professor V. L. D'Souza's little book on the Economic Development of the Mysore State is a very welcome contribution to the study of the present day economic conditions of Mysore viewed through the perspective of history. Mysore has forged ahead among Indian States in the matter of industrial and economic development and any account of Mysore's economic progress will be of interest to the rest of India. No one is better fitted to trace this development than the professor of Economics of the Mysore University.

The large headway that Mysore has made in matters industrial and economic is in no little measure due to the identification of the ruling power with the interests of the people and the nature of the unwritten constitution that is best calculated to advance the economic well-being of the people.

The Government, which, in earlier phases, restricted its efforts to agriculture, succeeded in constructing a number of irrigation works for which Mysore is justly celebrated. It also brought about the transformation of the subsistence character of farming to one of commercial agriculture by a judicious introduction of many crops. The construction of the Krishnaraja Sagara Dam and the introduction of Sugar Cane accompanied by a triennial rotation of crops have helped to increase the purchasing power of the agriculturist.

Even as early as 1881 the State recognised the necessity for industrial progress; but this policy began to take shape only from the beginning of this century. A vigorous policy of "fostered industrialism" as the author calls it, where the Government itself plays the part of the entrepreneur and financier, has ushered in the Hydro-Electric Works at Sivasamudram. Originally designed to supply the Kolar Gold Fields with energy, this scheme has succeeded in bringing a net work of industries into existence. Cheap power from this source has helped to-build up the Badarvati Iron and Steel Works, the Mandya Sugar factory and a number of rural electric schemes in various parts of the state. With its help cities are lighted, fields watered and huge factory engines turned.

Besides, the Mysore Government has turned its attention to the development of Cottage industries. Describing the woeful plight of the silk industry the author pleads for a higher protective duty by the Government of India. The fostering care of the government has been extended also to the Textile industry in general.

The author rightly remarks that the achievements of Mysore in the economic sphere are great absolutely and even greater relatively. He opines that the economic progress of the State has been hindered to a certain extent by the annual payment of subsidy to the Government of India.

A comparison of the present agricultural and industrial conditions of Mysore with its position in 1800, when Dr. Buchannan visited the land, serves to bring out in clear relief the contours of the present development.

Written in a direct and forcible manner and packed with information the book is a welcome addition to the meagre economic literature about the Indian States and serves to point the way for further work in connection with other Indian States.

B. V. NARAYANASWAMY.

AN ESSAY ON ECONOMY AND VALUE, being an enquiry into the real nature of Economy, *by* Alec N. Macfie, Macmillan & Co. 1936. Sh. 7/6 net.

This monograph of a Lecturer in Political Economy belonging to the the same University as the founder of Political Economy in Great Britain is of a peculiar type. As its explanatory title indicates, it is a philosophical disquisition on the *real* nature of Value and the place of Economy in the scheme of real values as well as an essay on the nature of the Science of Economics. Such a combination of purposes might appear a little unconventional now-a-days. But the author justifies it by appealing to the practice of his University, " where the philosophic percentage of economics has, since the days of Adam Smith, stoutly maintained its synthetic tradition " (Preface, page vi). The author is aware of the fact that his viewpoint may be criticised by the positive economist of the school of Lionel Robbins and would therefore request such a person to omit one of the chapters of the book which is wholly devoted to a philosophical treatment of the nature of Value, in general, the system of values and the place of Economy in the system. (Chapter VII). But in our opinion that would be like passing over the third act of a Shakesperean drama in unraveling the plot. Indeed, Mr. Macfie need not have apologised for the inclusion of this chapter in his book, if he had frankly confessed that it is as much an essay in Ethics as in Economics.

The author starts his discussion by acknowledging obligation to Professor Robbins' Essay on " the Nature and Significance of Economic Science," by quoting with approval the latter's definition of Economics, as " the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses." But, rather to our surprise, in the course of his comment on the definition Macfie practically combats its essential ideas. Thus, towards the end of the very chapter which is led off by this quotation, we find him picking holes in it. First, he takes objection to the expression, " behaviour as a relationship between ends and scarce means." As he quite properly points out: " behaviour can hardly be a relation. The natural way to put it would be ' behaviour in relating ends and scarce means.' The reason for this wording must be that Professor Robbins wishes perhaps unconsciously to avoid stressing the element of *purpose* which is surely an essential characteristic of Economic behaviour." (Pp. 16) Secondly, he quarrels with the London Professor about his views on the nature and definition of ' ends.' The latter has dogmatically asserted in his essay: " There are no economic ends. There are only economical and uneconomical ways of achieving given ends." (Robbins' Essay, p. 129). In the latter part of his book, Mr. Macfie demolishes this view (see particularly Pp. 69, 70 and 72). He first takes objection to the very use of the word " end " by Economists (p.19), and would prefer the word " purpose " instead. Accordingly

he would regard economic activity as *not* automatic or mechanical but purposive. He would therefore regard "the means to ends" category of Robbins as quite inadequate (p. 101). In fine Mr. Macfie's view on the Nature of Economics is very different from, if not diametrically opposed to, that of the London Professor; for, while the latter would regard the science as strictly positive, the former would have two branches of the study developed side by side—Positive Economics and Normative or Social Economics and would relate the latter to Social Ethics (pp. 79-80) and would "utterly refuse to apologise for this shading of the sciences into each other." (P. 80).

In spite of the author's profession that he regards his work as a superstructure raised on the basis of Professor Robbins' Essay, (see Preface vii-viii) it should be regarded as an independent work of a very different kind. The only relation between the two is that the author was perhaps prompted to write his essay by a critical study of the other. As has been already pointed out, its philosophical atmosphere is a peculiar feature of the book and we may now turn our attention to that aspect.

Following the lead of the German philosopher Nicoli Hartmann and certain contemporary British authors such as Professors R. B. Perry, S. Alexander and John Liard Mr. Macfie argues that Economy is a value by itself and it should take "its place in the frame work of social values under some such category as the organic whole" (p. 72). He would define economic as 'efficiency in organising the scarce,' 'the reasonable organisation of scarcity' and explain the economic principle in action as the "conscious endeavour to maximise the usefulness of means which was scarce relative to the experiences we wish to enjoy or to enjoy these experiences in that proportion in which they give the utmost possible satisfaction," (p. 75). He accepts wholesale, the idealistic definition of Value, 'as the satisfaction of a typical human impulse to self-expression.' (p. 95) He regards the principle of Economy as applicable "to all purposive activity so far as some kind of scarcity is also there involved" (p. 47) and "as an essential element in good life." (p. 50). Thus he would place 'Economy' by the side of the Platonic ideas of temperance and justice and in support of his opinion he quotes Adam Smith's interpretation of Platos' view of justice: "It consists in that state of mind in which every faculty confines itself within its proper sphere without encroaching upon that of any other and performs its proper office with that precise degree of strength and vigour which belongs to it." (Theory of Moral Sentiments). He rather quaintly adds: "This is just another application of the marginal analysis of economics, applied in this *case* to the impulses or faculties or duties." (p. 51). The author devotes a whole chapter (chap. IV) to the elucidation of this point of view, in the course of which he expatiates on the place of Economy in the experience of Beauty in the fine Arts of Architecture, Painting, Music and Literature in its various forms and concludes rather significantly: "If the economic principle has itself essential value, then it follows that economics is fundamentally a normative science, not merely a positive science like Chemistry. We fit scarce means to ends under the persuasiveness of a value, to maximise total satisfactions. We cannot do this without considering the relative satisfactions rendered by particular courses of action, and this very comparison of satisfactions acts on your estimates chemically, biologically, spiritually, so that the choice which finally emerges is unique and quite different from

any haphazard collections of possible satisfactions. For it is a selection rationalised by the economic principle as applied by the individual." (pp. 69-70). In another place he says: "There cannot be moral indifference in the world of values. Thus economy essentially involves scarcity, and in the world as we know it, it is difficult to see how the regulation of scarcity can ever be merely indifferent." (p. 94).

Thus, starting from the definition of Professor Robbins, the author comes in the end to a diametrical opposite view, in regard to the nature of Economics. The most that he is prepared to concede to the other view is, there may be a positive side to the science where moral values need not be taken into account. But to regard it only as a positive science and deny its normative aspect is both methodologically wrong (p. 27), and practically useless, if not, dangerous (for example in the treatment of the trade cycle.) (p. 26 and preface vi).

The student of Economics as such may not be prepared to go all the way with the learned author in his disquisitions on philosophical topics, but as a votary of social science and especially, if he happens to be an Indian, he would appreciate his broad outlook and commend it to fellow-students for thereby he would be following with the traditions of J. S. Mill, Dr. Marshall and Professor Pigou in preference than the new and narrow views of Professors Robbins, Von Mises and Dr. Cassel.

N. S. Narsingha Aiyangar

NATIONAL PUBLIC WORKS, League of Nations, 1934. P. 281.

The volume under review is the result of an enquiry carried out in 1934 by the Committee of Enquiry into Questions of Public Works and National Equipment set up by the Communications and Transit Organisation of the League of Nations. The enquiry was conducted by the method of the Questionnaire issued to the Governments of the various countries. As many as twenty-nine governments including those of Great Britain, France, Italy and U. S. A. sent more or less detailed replies and these are published very much in their original form. The statistical data in the majority of cases are prefaced by general notes by the Governments concerned. The main purpose of the enquiry was to find out the effect of national public works undertaken during the Depression on recovery and employment.

Some idea of the range and nature of the enquiry will be gathered from the fact that information was collected under five different headings: (a) Description of the main public works, (b) the principal administrative methods followed for the execution of these works, (c) the principal methods of financing such works, (d) an estimate of the allocation of the expenditure on public works as between materials and equipment on the one hand and labour on the other, and (5) the opinions of the Governments concerned on the effects of such public works on recovery and employment. Further, the works are classified under thirteen different categories such as roads and bridges, railways, land reclamation and land

improvement, inland waterways, sea, river and airports, electrical, hydro-electrical, and gas works, telegraph, telephone and wireless broadcasting.

It is generally agreed that in a time of prolonged depression when business confidence is low, private investments are on a small scale and unemployment is abnormally high, it is appropriate for the state to stimulate investment and employment by large-scale public works. The idea behind such a plan is that when private economic activity has shrunk to small proportions with disastrous consequences to employment, national income, and public revenues, the gap should be partly filled by public economic activities undertaken directly by the state or by semi-governmental and private agencies with the encouragement, approval or assistance of the state: Such a policy of expansion of public works in a time of depression is regarded as appropriate for several reasons: (*a*) it is the duty of the state to mitigate the sufferings incidental to a large volume of unemployment; (*b*) money being plentiful and cheap during a depression, it is economical in the long run to finance productive and protective public works in a time of depression; and (*c*) since public revenues suffer a heavy decline with the fall of national income, it is in the long run financially sound for the state to stimulate economic activity with borrowed funds, because the growth of national income would ultimately bring in large revenue, which will enable the state to repay the loan with the return of prosperity.

It is interesting to note that the majority of the Governments including those of the U.S.A., S. Africa, Australia, Belgium, Italy and Norway are definitely of the opinion that the undertaking of public works during a depression is tremendously beneficial from the economic and social point of view. The views expressed by the U.S.A. Government (pp. 123—25) and the government of Norway (p. 207) are particularly interesting and instructive. The Government of the U.K., on the other hand, return a definitely unfavourable verdict on the value of public works as a stimulant to employment, when they state as follows: "Experience in recent years in this country has shown that the stimulation of public works selected primarily in respect of their employment-providing capacity has an effect on the employment position which is small relatively to the heavy expenditure incurred, and the works, when completed, leave burdens on national and local finances which impede the recovery of normal activity . . . . the experiment of large-scale public works as a method of dealing with unemployment has been tried and has failed, and it is not intended to repeat it. (P. 82).

In view of the usually high level of discussion of economic questions in the United Kingdom, this expression of opinion by the British Government on the merits of public works as an equilibratory factor in trade cycles is remarkable indeed. But, there are leading thinkers like Mr. Keynes who hold a contrary view of the matter. Moreover, the Conservative Party in the United Kingdom is generally obstinately conservative, and sometimes even reactionary, on economic questions, partly perhaps because of the vested interests of party members, and partly because of the influence of the City, which is the very citadel of financial and economic orthodoxy.

In any case, such wide divergence of views among the governments of the leading states of the world on an important matter like this only

shows that it is one of the unsettled questions of the present day, which should be the subject of a thorough-going investigation before we can reach a definite conclusion one way or the other.

We would conclude by pointing out an important omission, which is regrettable for more than one reason. The volume does not contain any report on public works from the Government of India. We are sure that this is due entirely to the negligence of the Government of India. India is an original member of the League of Nations. She contributes annually a sum of over thirty lakhs of rupees to the expenses of the League Secretariat. (It was recently reported that the contribution has been somewhat reduced). And yet, no information is supplied to the League on this as well as many other important matters. Consequently, the value of these publications by the League is considerably minimised to all Indian readers. We suggest that it is high time for the Government of India to organise economic and statistical information of an adequate nature, without which no civilised government can now-a-days discharge its increasingly important and increasingly complex functions in an appropriate and efficient manner.

H. L. D.

THE INDIAN TARIFF POLICY with special reference to Sugar Protection, *by* B. N. ADARKAR, the Karnatak Publishing House, Bombay, 1936, Rs. 3. Pp. 161.

The publication of this book is a very timely one, first, because both those who think that the actual administration of the tariff has been too weak, halting, hesitant and ineffective and those who have the idea that there has been much too much of spoon-feeding and indiscriminating grant of tariff favours have this much common ground that the working hypothesis as well as the administrative technique of Indian protective tariffs needs to be thoroughly overhauled in the light of the experience of the last twelve years, and second, because the author has subjected the sugar tariff, which is now under consideration by the Tariff Board, to a most searching and illuminating enquiry, which should be exceedingly valuable to the Tariff Board in arriving at a sound conclusion regarding the future of the sugar tariff.

In the first three chapters of the book, the author makes a theoretical analysis of three important aspects of protection, *viz.*, protection as a cure for unemployment, protection as an aid to industrialisation and the burden of protection on the consumer; chapters IV and V are devoted to an examination of the specific case of the sugar tariff as it is, and the last chapter sums up his conclusions. In the first chapter on Protection as a cure for unemployment, the author discusses the matter in the light of recent monetary and trade theories as developed by Keynes, Harrod and Whale, and concludes that, even though under certain extremely favourable circumstances protection might increase net investment and net employment, such a favourable conjuncture would rarely arise, and that any benefit that might arise in respect of employment would be outweighed by serious disadvantages such as a permanent twist to the economic structure, growth of counter-tariffs, rise of powerful vested interests, etc.

Protection, judged as as an aid to industrialisation, has also, according to the author, a much narrower scope than it is usually supposed to have. Moreover, since protection means a fall of customs revenue, which is the main prop of the financial structure of the central government, a high degree of protection would reduce public revenues and thus retard the development of the nation-building departments. And, finally, the author shows, both by theoretical analysis and with the aid of statistical data, that the protection of the sugar industry has proved to be a high burden on the consumer.

These three theoretical chapters have laid some important recent theoretical developments under contribution and are valuable as far as they go. But, as already said, chapters IV and V on the protection of the sugar industry, which are as searching and vigorous as they are stimulating, are the real contributions of the author. He is at his best here and his analysis is altogether brilliant. He has examined, in the light of all relevant data, the grounds that led the Tariff Board to grant a high degree of protection to the sugar industry and has conclusively proved that those grounds are invalid. And he has succeeded in exposing a whole series of fallacies that underlie the present policy of sugar protection in India and in showing that that policy has failed in the major part of its objective and has promoted an unhealthy development of both sugarcane cultivation and sugar industry. And the author rightly arrives at the following conclusion regarding the future of the sugar tariff: "Our survey of the present position of the sugar industry leads us to the conclusion that the industry has now reached a stage in which more liberal expenditure by Government and industrialists on research on its agricultural and manufacturing sides is likely to be of much greater benefit than the continuance of protection at its present level." We are sure that this verdict will be wholeheartedly accepted by all those who have studied the question of tariff in relation to the sugar industry in an impartial manner. And we suggest that the Tariff Board and the Government of India would be well advised to study these two chapters of the book most carefully before arriving at a final decision regarding the future of the sugar tariff.

H. L. D.

STATISTICAL PUBLICATIONS OF THE LEAGUE OF NATIONS, 1933-34. Pp. 229.

Whatever view one may hold regarding the power and the capacity of the League of Nations to maintain international peace, justice and concord, the informative and educative value of the statistics of economic and social development which are being collected, arranged and published under its auspices, cannot be overestimated. Information in a compact form regarding countries of the world, is not easy to obtain, and what is extremely important to the student, the statesman and the businessman, is up-to-date, reliable and comparative statistics relating to trade, industry, currency, employment and prices. The economic and social conditions of a nation are profoundly influenced by external developments and even a policy of national selfsufficiency cannot be planned and given effect to without authentic information regarding the outside world. An organisa-

tion like the League of Nations alone could have undertaken to collect and present in a comparative form statistics of such vital economic and social importance and one must feel grateful to the League for its annual and occasional publications.

The Statistical Year-Book for 1933-34, World Production and Prices, 1925—33 and Commercial Banks, 1925—33, are excellent samples of the publication of statistical information by the League of Nations. The first of these gives tables showing by countries, broad features of populations, wages, employment, production and consumption, transport and commerce, currency, prices and public finance. Every care is taken to attain accuracy and comparability in the statistics. Seven geographical maps and an alphabetical index have been attached. The second of the above publications, gives indices of primary and industrial production, of international trade and shipping and of price movements. The explanations given throughout are very helpful. The third volume is a continuation of the memorandum on commercial banks, 1913—29, published in 1931 and gives copious information regarding the position of commercial banks in the countries of the world. The introduction summarising the salient features of credit and banking developments is very interesting and the introductory notes prefacing the statistics of countries facilitate the understanding of the information supplied. The labour bestowed on this work is deserving of the highest praise. The student cannot find a better source of information of world's banking and a more useful guide to the appreciation of developments in that field.

V. G. K.

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METHODS OF AGRICULTURAL ECONOMIC RESEARCH AND THEIR APPLICATION IN INDIA

BY

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The object of this paper is to examine the scope for agricultural economic research, as it is understood in most of the Western countries, in the present agricultural conditions of India.

Let us start with a definition of Agricultural Economics. "Agricultural Economics," says Taylor, "deals with the principles which underlie the farmer's problem of what to produce and how to produce it, what to sell and how to sell it, in order to secure the largest net profit for himself consistent with the best interests of society as a whole." Now, obviously these principles can only be formulated by analysing and comparing a large amount of data concerning agricultural practices both in the field of production and in that of marketing. Hence the large amount of attention bestowed on the methods of collecting statistical data in the Western countries. Let us briefly describe the most important of these methods and see how far they are practicable in the present state of affairs in India.

The methods which have been most conspicuous in monopolising the attention of the agricultural economists are (*a*) cost accounting, (*b*) financial accounts and (*c*) the survey method.

Cost Accounting " aims at examining each individual farm in as great detail as possible . . . Records are kept throughout the year for each part of the farm, so that at the end of each financial year the profit and loss of each enterprise on the farm can be calculated, as well as the profit and loss of the farm as a whole." The method " exacts regular attention from the farmer throughout the year in filling up his record."[1]

The data gathered according to the method of Financial Accounts " consist of statements of annual receipts and expenses of as many farms as possible . . . As compared with the method of cost accounting, financial accounts can provide information for a much larger number of farms. The information obtained has much less detail as to the management of each farm than the costing method yields, but a better statistical sample is obtained of data relating to the main features of the farm business . . . European countries operate the plan through farm accounting associations. Books are provided for the farmers and the balancing is done by clerks employed by that Association."[2]

In the Survey Method, " the data are obtained directly by a visit to every farmer in the area surveyed. If many of the farmers in the area keep accounts, information may be more quickly obtained and may be more precise. But it is claimed that even where the majority of the farmers base their information only upon the recollection of their year's transactions, the average of a group will be quite as reliable even if each individual farm record may not be as accurate as where accounts are kept. It is the group averages which are used in analysis by the survey method . . . Since every farm is visited, the data, it is claimed, are likely to be more representative of the average conditions of the area than the data obtained by either cost or financial accounts. The survey method makes full use of financial accounts where these are available on farms which are being surveyed, but the method does not depend upon the existence of accounts."[3] The objects expected to be attained by the survey method are:—" (1) To secure reliable information regarding agriculture based on conditions as they exist on the average farm of the various types. (2) To determine the factors that have the greatest effect on raising or

[1] The Survey Method of Research in Farm Economics, *E.M.B.* 14, page 9.

[2] *Ib.*, pp. 9-10.

[3] *Ib.*, p. 10.

lowering farm profits by comparing the business organisation of the successful and unsuccessful farms. (3) To give suggestions as to the most profitable organisation of the farm business. and (4) To determine the cost of production of farm products."[4]

Agricultural Economists have spent a good deal of their energy in pointing out the merits and demerits of each of these three methods of research, but as Mr. C. S. Orwin, the Director of the Agricultural Economics Research Institute, Oxford, has remarked, " the exclusive rightness or wrongness of either one of them can be, like Mark Twain's death, grossly exaggerated."[5] He has also rightly pointed out that they are by no means the only methods of collecting statistical data; " there are numerous variations within each of these methods themselves, and there are also other methods," *e.g.*, the " mailed questionnaire " method and the " case method."[6]

I have quoted these passages at length in order to show that the various methods described in them are hardly suitable in the agricultural conditions of India as they exist at the present time. The reason for this statement is to be found in certain implicit assumptions upon which these methods proceed. They assume, firstly, that the farmers as a class know reading, writing and some arithmetic; sedondly, that they grow their crops or breed their animals mainly for the market; and, thirdly, that they are free to move into other professions if farming does not pay. In the absence of these assumptions, that is, when the farmers as a class are absolutely illiterate, or when they produce for their own and their families' subsistence, or when they are tied to agriculture whether it pays them or not, there is obviously neither the possibility of collecting statistical data, nor any scope for utilising them even if they were available.

The present conditions of agriculture in India very largely correspond to this. First, let us take the case of literacy. " The proportion of boys of school-going age attending primary schools is still disappointingly small, . . . and the proportion of literates is very low both absolutely and relatively to the number of boys attending schools." Moreover, we are not in a position to assume that " all the boys attending such schools

4 Agricultural Economics in the Empire, *E.M.B.* I, p. 12.

5 *Journal of Proceedings of the Agricultural Economics Society*, Vol. I, No. 3, p. 91.

6 *Ib.*

remained at them long enough to ensure their reaching the minimum standard of literacy" . . . "No definite information is available as to the extent to which those who reach this standard remain literate after their school-going days are over, but there is reason to believe that relapse into illiteracy is not uncommon." . . . "The actual condition of literacy among the rural population is certainly worse than the averages suggest." The only conclusion which can be drawn from these remarks of the Royal Commission on Agriculture[7] is that the classes who actually carry on the work of agriculture in India are, for all practical purposes, entirely illiterate. To expect them to keep detailed accounts of their business or to record their incomes and expenses, or even to supply verbally a correct and analytical information of their productive operations to an investigator, is only to hope for the impossible.

The second characteristic of Indian agriculture with which we are here concerned is the preponderance of what is known as subsistence-farming. Here again the authority of the Royal Commission is both sufficient and decisive. Note, for example, the following statements: "Large towns are few, great cities rare; most of the 500,000 villages have not yet been touched by metalled road or railway; post offices are many miles apart, telegraph offices still more distant from each other . . . The urban population is relatively small, a little over 11 per cent of the whole, and the demand for agricultural produce for final consumption in the towns is thus small in comparison with the whole volume of production. Circumstances, therefore, have combined to maintain what is, in large measure, a self-sufficing type of agriculture."[8]

It hardly requires an argument to show that in a self-sufficing domestic economy there is little or no scope for collecting any kind of statistical data. Indeed the *raison de'être* for keeping such data, is absent in such circumstances. Although Sir Henry Rew regards agriculture as a "Commercial enterprise undertaken with the object of making a profit" *even when "the agriculturist wins from the soil only the means of subsistence for himself and his family,"* yet the fact remains that the motive force prompting the producer to keep an eye on his incomings and outgoings is usually absent wherever the system of self-sufficing domestic economy prevails. India is no exception

7 See *Report*, p. 514 and pp. 519-520.

8 See *Report*, p. 5.

to this rule. An agricultural economist approaching an Indian peasant to be supplied with the statistical data of his business, is likely to make a poor show of his own commonsense before the illiterate but shrewd cultivator.

Now we come to the third factor which stands in the way of keeping any kind of data whatsoever by the agricultural classes in India. A man is likely to keep an account of the income and expenditure of his business only when he is in a position either to improve its financial aspect or to give it up and start some other business which may seem to him to offer better prospects. Now, what is the situation in India? The direct dependence of nearly 75 per cent of the population on agricultural and pastoral pursuits is not due to any extraordinary profitableness of these professions; it is only the result of the more or less complete absence of alternative means of earning a living, a result which has been brought about, during the past century and a half, by the presence of foreign competition and the apathy of the administration. Large numbers of artisans have, throughout the period, been giving up their crafts and turning to the land as the only means of support. The industrial revolution with all the hardships of the short period of transition, ultimately led, in the European countries, to a remarkable rise in the standard of living of the general masses. But in India, on the one hand, it ruined and ultimately wiped out the old industries and, on the other, it led to a gradual deterioration of the one remaining industry, *viz.*, agriculture, which has suffered and is still suffering from the most bewildering sub-division and fragmentation of agricultural land—a direct result of the intense pressure of population on the soil, which is itself the direct consequence of the disappearance of alternative occupations.

The Royal Commission too has admitted that " the problem is definitely one of superfluity of agricultural labour " and has quoted with approval the opinion of the Famine Commission of 1880 which observed that " the numbers who have no other employment than agriculture are greatly in excess of what is really required for the thorough cultivation of the land." " Since that date," observes the Royal Commission, " the population has increased considerably " and " by far the greater number has been added to the rural population." But, while recognising the necessity of " lessening the pressure on the land " the Commissioners do not see much hope in the industrialisation of the over-populated areas but regard the mobility of the agricultural labour as " the essential condition for

relieving pressure on the land."[9] We are not here concerned with the problem of industrialisation *versus* mobility of labour, all that we have got to realise is the fact of the undue pressure on the soil and the inability of the large masses of agricultural population to find any alternative means of earning their livelihood. How can we expect a people, placed in a situation like this, to be punctilious about the income and expenditure and the net earnings of their productive operations, even if they were otherwise capable of doing so? How could such account-keeping, even if it were possible, enable the large peasant family to employ all of its numbers profitably on the tiny piece of land? The Indian peasant is as reasonable a human being as his fellow in any other country. It is a credit to him that he still keeps his head in such an impossible and utterly discouraging environment.

The combined result, in short, of these three factors, *viz.*, general illiteracy, subsistence-farming and lack of alternative occupations, is to eliminate the possibility of adopting any of the well-known methods of economic research which have been referred to above. What, then, is the agricultural economist to do in India? Obviously it cannot be true that there exists no scope for the exercise of his capacities in India. On the other hand, no country is in greater need of guidance and direction not only from the agricultural economist but from experts in practically every branch of knowledge.

The best approach to this problem is, in my opinion, somewhat on the following lines:—

The degradation of the Indian countryside has reached a point where it is impossible to reform it by a piece-meal method. Reform in one aspect has come to be so dependent on reform in others that unless measures are simultaneously taken in the latter, there can be no hope of attaining any success in the former. Indebtedness, for example, cannot be relieved unless the peasant improves both his methods of production and some of his social habits; reform in these latter cannot be brought about unless the peasant receives a certain minimum of education; education cannot be expected to make a headway unless there is some rise in his standard of life which is itself dependent on the removal of indebtedness. And so the vicious circle is completed again and again. The remedy lies not in breaking it at any one point but in attacking it from all sides at the same time. And this attack can only be effective when experts from the various

9 See *Report*, p. 580.

departments of State which are responsible for the welfare of the agricultural population come together, find out the fundamental evils requiring the most urgent attention, chalk out a comprehensive programme of reform, and proceed each to perform the part entrusted to it. At the present time much good work is failing to produce any lasting effect owing to lack of co-ordination between the various state departments concerned in the common job of improving the lot of the peasant. What is wanted is a sort of joint organisation in each district comprising representatives of the Revenue, Argicultural, Veterinary, Co-operative, Irrigation, Education and Health departments.

The problems calling for urgent reforms through the agency of these co-ordinating bodies are too obvious to stand in need of detailed investigations and elaborate statistics. Not that I am against economic enquiries and statistics; my point is that the absence of these should not prevent us from proceeding immediately with practical reforms at least in the preliminary stages. We are sufficiently well acquainted with the evils existing in the countryside. The indebtedness of the rural population, the fragmentation of holdings, the defective system of marketing, the absence of subsidiary industries or alternative occupations and the utter lack of education and sanitation, are problems calling aloud for reforms, they do not require to be proved by statistics. Indeed statistics, worthy of the name, can hardly be collected unless a tolerable state of affairs is first created in the above-mentioned aspects of rural life. It is only then that we shall be able to realise the necessary conditions for carrying on economic researches implied in the three modern methods, common in the United States and in some of the European countries. Reforms, carried on simultaneously, in all the aspects of rural life, are equally important and equally urgent, with perhaps local differences of emphasis in different provinces. This may appear to be a rather ambitious scheme but, as I have already pointed out, the nature of the situation is such that unless advance is made on the whole front, victory is not likely to be achieved in any of the partial activities. To provide an organisation which will co-ordinate the activities of the various departments touching the life of the rural masses is, what I consider to be, the fundamental object of Rural Reconstruction.

RURAL RECONSTRUCTION THROUGH CO-OPERATION: BETTER LIVING SOCIETIES

BY

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Introduction.

The Co-operative movement in India is carrying out rural reconstruction of the country by the formation of different forms of societies. The most important of these are the Better Living Societies in the Punjab.

If, as Sir Horace Plunkett says, better business is the foundation alike of better farming and better living, better living is the object of both. Better living societies, therefore, have a special importance.

Best Agency for Rural Reconstruction.

Rural reconstruction has to depend upon persuasion and propaganda. Much can be done for the movement by enthusiasm, but for continuity something more is required. In each village an institution devoted to this work is needed and that institution must be adequately supervised from outside the village. Otherwise, there can never be real continuity and without continuity much of the effort is bound to be wasted. There can be no better institution to secure continuity, by means of a local organisation with adequate supervision than the Better Living Society. Once the work of rural reconstruction has begun in a village the co-operative better living society must step in to bind the people together in a permanent institution to continue and develop the work, so that it need not fade away as soon as the original enthusiast has turned his back on the village.

Professor Kale in his Presidential Address delivered at the Bihar & Orissa Co-operative Federation Congress in February, 1937 said that " Rural organisation for improvement will assuredly succeed better if it is placed on a co-operative basis.

The spirit of co-operation is vital to organised reconstruction and progress in rural areas."

The Punjab Registrar writing about the working of these societies in 1934, remarked that "I am myself convinced (and in this I have the support of the Commissioner for Rural Reconstruction, Punjab) that these societies are the best, if not the only existing agency, for the expansion and enforcement of permanent measures for rural reconstruction."

The twelfth Conference of Registrars of Co-operative Societies held at New Delhi in December, 1936 resolved that "the Co-operative Movement should be used to the fullest possible extent compatible with its principles for extending the rural reconstruction movement having regard to the fact that it is the best and in many areas the only means of providing the organisation without which the rural reconstruction movement cannot expect to be permanent." Therefore the importance of co-operative better living societies in the sphere of rural reconstruction can never be over-emphasised.

Objects.

The objects of these societies are to promote the economic interests of their members and more particularly:—

1. To reform bad customs prevalent amongst the members;
2. To improve the physical, moral and spiritual condition of the members;
3. To prevent the waste of money and inculcate habits of thrift;
4. To teach and practice the rules of hygiene and combat epidemic diseases;
5. To cultivate the sense of self-respect and resist corruption;
6. To assist in arrangements for the education of members and their children and for the organization of games and all useful occupations which render the life of the community more pleasant and liberal;
7. To promote other measures, designed to encourage in the members the spirit and practice of thrift, mutual help and self-help.

Capital.

1. The capital of the society is composed of (1) entrance fees, (2) contributions, (3) donations, (4) fines.

The Society is not allowed to receive any loans or deposits.

Customs.

A set of rules, practices and customs have been prepared for the consideration of a general meeting of the society. These have been drafted in consultation with Commissioner, Rural Reconstruction, and are in line with his general programme of village uplift. It is emphasised that these rules are not intended set of ' model rules,' in the sense that efforts should be made to induce societies to adopt all of them. They are merely a collection of rules concerned with various aspects of rural reconstruction, any of which may be adopted if the general meeting of the society so decides. As it is extremely dangerous to induce or allow any society to adopt all these rules at once and without the most careful consideration, therefore care should always be taken to see that only those rules are adopted in the beginning which a society may be in a position to carry out in practice.

It is important that no advance should be attempted which is too rapid and members should not be induced to accept in a moment of enthusiasm any rule which they will not afterwards enforce. For this reason the model by-laws do not contain any specific rule or limit with regard to customs or expenditure and it is advisable that even when a society is formed, such rules and limits should only be accepted after considering the opinion of the most unstable members of the society. It is, therefore, suggested that the first general meeting should draft the proposed rules and should give the members time to think over them until a second general meeting and should then finally adopt them if the opinion is unanimous. The rules imposed should be such as will be supported by public opinion.

Area of Operation.

It is also important that the area of operation of the society should generally be small in order to ensure mutual supervision which is necessary in matters of this intimate and personal nature. If, however, a caste society is found desirable it may work over a larger area than one village. Societies should first be formed among persons who are constantly meeting one another and can influence each other's daily actions.

Waste.

"The reduction of waste," writes Mr. Brayne in *Rural Reconstruction*, "whether on ceremonies, litigation, ornaments or drink is a pressing social problem. In spite of protestations to the contrary a lot of waste is still going on. The Punjab supports, with apparent pleasure, the most elaborate and fully developed system of litigation in the world, and this alone must cost many crores annually with its judges, jails, punitive police posts, magistrates, munsiffs, assessors, barristers, advocates, petition-writers, copyists, libraries, printers, publishers, witnesses —false and true—and all the other paraphernalia. If even a quarter of the money and effort spent on litigation could be devoted to rural reconstruction we should have far more money than we wanted."

Ornaments.

"Ornaments are still a drain. Nearly every village supports a goldsmith. If only they could be replaced by school mistresses? If only every ounce of the precious metals, except the reasonable quantity, that no one will deny the ladies, could be put into well-sinking or bund-building or could be replaced by Cash Certificates and Savings-Bank Accounts? Innumerable holes are still bored in the little girls' ears in most villages, and earrings still adorn many boys and men. If the people could be persuaded to agree to put no ornaments whatever on children and to stop boring their ears a great step forward towards thrift and child welfare would have been made.

Ceremonies still account for much expenditure and the trade in liquor, licit and illicit, still thrives among people who clamour about the load of their land revenue and *Ābiana*. Even tobacco and gun-licences run away with much money that could now-a-days be better spent in other ways.

Waste, therefore, is still with us, and thrift is an urgent lesson to be learnt. Increased production is of little value without thrift. It is merely pouring water into a leaky bucket."

Better living societies are trying to do away with the causes of litigation, are teaching thrift on the occasion of social and other ceremonies and are thus performing useful functions in these spheres also.

Better Living before Credit Society.

At first as a general rule better living societies were started only in villages where there was a successful credit or thirft

society because it was thought that it was imprudent to attempt the moral reformation of persons who had not been trained for several years previously in the simple process of lending, borrowing and saving, which do so much to strengthen human character. But of late a change has been made in this policy on account of past experience. And now it has been decided that better living societies need not be linked with credit or thrift. They may be started independently of credit or thrift societies where there is enough staff to supervise them and conditions are favourable.

Mr. Darling in his Presidential Address delivered at the U. P. Co-operative Conference held in January 1937, referring to the question whether reconstruction should not come first and credit second, said, " When Co-operation is brought to a village, whether we should not first of all form a Better Living Society to improve farming and reform social customs, and give education to both young and old and only if this succeeds, start a credit society. In the Punjab credit has always preceded reconstruction and I remember that, when the question of reversing the process came up for discussion nine or ten years ago, I felt that no change should be made, because a credit society touched the whole of a man's economic life and was more likely, therefore, than a Better Living Society to draw people together for their common purposes. But the intelligent villager is now prepared to consider many more changes than he was two years ago, and consequently Better Living Societies have a much wider scope and offer a much better means of testing a village's capacity for Co-operative Credit. Moreover, our experience since the fall in prices shows that the need for credit is much less than used to be supposed. In the Punjab, therefore, opinion is veering round to the view that reconstruction should be taken up first, or at least hand in hand with credit."

Agreement.

The principle of Better Living Society is that members bind themselves by a voluntary agreement to submit to the compulsion of their elected committee and general meeting.

When a member is admitted to a Better Living Society, he has to sign an agreement to the effect that in consequence of being a member of the Co-operative Better Living Society, he will observe such special rules and practices as the general meeting may approve; and in the event of his breach of this undertaking he will pay to the society such fine not exceeding Rs. 100 as the committee may impose. Such fine becomes due for payment

immediately after imposition, but the member may appeal to the general meeting.

Working of Societies.

A brief description of the working of one or two societies will illustrate their condition.

The Handal Co-operative Better Living Society was registered on 7th June, 1927. Its membership now consists of 133 persons. In the course of first two years of the life of the society nine marriages took place. Four of these were of boys and five of girls. Besides these marriages 14 other ceremonial customs were gone through. It is reported that out of the nine marriages only one was performed according to approved customs and in the rest one or other of the minor customs was broken. This, however, does not imply that the society did no useful work in curtailing the expenditure on marriages. It is estimated that at least Rs. 18,000 were saved to the members concerned.

The Society was in its initial stages and therefore it did not take serious notice of the minor customs. 22 members were, however, fined and 11 of these appealed to the general meeting. As a result the fine of two was remitted and of 9 reduced. Out of the 20 members, who had to pay the fine, 3 paid themselves and from 4 it had to be recovered by arbitration proceedings. Altogether Rs. 60 were recovered. The remaining agreed to pay after some time.

The Society spent Rs. 60 on propagating the cause of Better Living at a fair in the neighbourhood. It gave a donation of Rs. 10 to the local school.

In 1929, 7 marriages and 12 other ceremonies took place. 3 marriages were performed according to the approved customs but in the remaining 4 marriages the approved customs were broken to a certain extent. As for the other 12 ceremonies, 5 were in accordance with the approved rules. 11 members were fined for breaking the by-laws but no recovery was effected. The statement given above reveals the condition of the Society before the economic depression.

When the depression began the people were obliged to cut down expenditure on ceremonies as they had very little money left with them, and the moneylenders were not in a mood to advance more cash to the agriculturists. This necessitated the postponement of marriages and other ceremonies and also the curtailing of expenses to a minimum in unavoidable circumstances.

In 1934 only 13 ceremonies took place. The number of members who went against the by-laws fell to 3 only. This decrease was due to two causes. The teaching and close experience of the Society awakened a sense of responsibility in the members. The lack of money taught them virtues of thrift. This had a good effect on the members.

This Society is composed of Sikh Jats, one of whose weaknesses is excessive drinking. The Society has, therefore, adopted a resolution prohibiting the use of liquor. This has worked very well in the village. It is claimed that this provision is decreasing the crime.

There are occasions when this rule is broken. In 1935 two members went against this resolution and became intoxicated by heavy drinking. They were fined Rs. 50 each by the Committee. One of them appealed to the General Meeting, and begged to be pardoned. The General Meeting, taking into consideration the weak financial condition of the member, remitted the fine and closed the case with a warning. This had a bad effect on the recovery of fines from other members.

The one drawback of this, as well as of many other societies is to impose fines too frequently and not to recover them. As an instance 16 members were fined Rs. 217 in Lahore District in 1936. But only Rs. 22 were recovered. This deteriorates the sense of discipline in the members and ultimately results to the detriment of Society. It may be mentioned here that one society, Chak 323 G.B. in Lyallpur, fined its members Rs. 140. The members paid Rs. 132 8a. without any coercion. This shows their cooperative spirit. The best policy in these societies is to bring social pressure on the members and to spare the use of penal clauses. But when occasion arises for giving effect to penal clauses, action should be swift and recovery of fine immediate.

The Society has recently begun to devote its attention to the spread of rural uplift programme. Members have opened ventilators in their houses, and they are using manure pits; they have taken to the use of improved seed and also scientific implements recommended by the Agricultural Department. It has employed a sweeper for cleaning the village streets every day. The society has life and is doing fairly well.

Another society, which was registered in 1927, has 41 members. During the last three years of its life, three marriages of members were celebrated. The General Meeting fixed Rs. 250 as a maximum expenditure on a marriage as against the usual expenditure of Rs. 1,200 or more before.

The society also banned the fireworks and dancing girls on marriages. It limited the purchase of ornaments to a maximum of Rs. 200. One member spent more on a marriage than fixed by the society and was fined.

The members are fully convinced of the value of the society, but find difficulty when a marriage takes place between themselves and another village which has no better living society. In such case the society finds it beyond its powers to control the customs and the expenditure.

There can be no doubt of the immense potentialities for good possessed by this type of society. A very large percentage of the expenditure on festivals is entirely unproductive. The success of a society would appear to depend entirely on the degree of co-operative spirit amongst the members and the determination of the commttee to impose a fine when a default occurs. The great hope of these societies is that when once a bad custom has been broken it will remain broken and the good example would spread by its own momentum to other villages.

Progress.

The number of these societies is now 736, their total membership is 28,928 and the average membership is 39·3 per society. The following statement shows the progress made by these societies since 1927:—

Year	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Societies ...	136	231	289	312	359	430	487	520	590	736
Members ...	5350	8665	10943	11610	13003	15327	15338	18261	20909	28928
Average Membership per society.	39	38	37	37	36	36	31	35	35·5	39·3

The number of societies was 136 in 1927. It rose to 487 in 1933 and 736 in 1936. The membership increased from 5350 in 1927 to 15338 in 1933 and 28928 in 1936. The average membership per society dropped from 39 in 1927 to 31 in 1933. After this year there has been a welcome increase in average membership which has this year surpassed the average of any previous year and now stands at 39·3.

In 1936 there has been a large addition in the number of societies and members. The societies rose from 590 in 1935 to 736 in 1936, which means an addition of 146 societies. The increase in membership has been more than 8000. This substantial progress is the result of the efforts of a special staff of

Inspectors and Sub-Inspectors, who were employed with money placed by the Commissioner, Rural Reconstruction at the disposal of the Co-operative Department. Muzaffargarh, which is the most backward district in the province, made the best progress by adding 21 societies and over 1000 members. This is a hopeful sign. The addition in other districts has not been less spectacular, Ferozepur had 18 new societies, Lyallpur 17, Ludhiana 16, Ambala 14 and Hoshiarpur 11. This progress is a sufficient proof, if proofs were needed at all, to convince anybody that there is a great need and also a demand for these societies and their development is only a question of men and money.

District Surveys.

Ambala easily tops the list with 77 societies. Lyallpur has 67 societies and 2704 members. There is one special Inspector and 3 Sub-Inspectors for better living societies in Lyallpur. A noteworthy thing about this district is the prompt recovery of fines by societies when imposed. Two societies inflicted fines of Rs. 132 on members; the whole of this was recovered. 32 societies have adopted by-laws for rural uplift including eradication of theft and cattle lifting, a notorious custom common to this area. One society has employed two sweepers who, in addition to cleaning the streets, also water the trees planted in the village. One society competed in the village sanitation competition and was awarded a prize of Rs. 100 for general cleanliness and rural uplift work.

The number of societies in Rawalpindi is 48 with 1373 members. 4 societies have adopted the new model by-laws with a schedule containing rules regarding health, sanitation, better farming, recreation, etc.

Jhelum has 46 societies, almost all of which lay emphasis on social improvement. In Hissar all the 9 societies have adopted by-laws about the improvement of health and sanitation. In 1936, 66 marriages were performed in Hissar societies. Rules were observed in 63 cases, which is a very satisfactory state of affairs. In Gurgaon there is no society which has extended its activities beyond the restricting of expenditure on ceremonies. But the co-operative staff is actively engaged in the rural reconstruction work. 25 villages selected for intensive uplift work were visited monthly by the Sub-Inspectors and the Inspectors as often as they could. Karnal has only one society and Rohtak none.

In Jullundur 4 societies out of 15 have adopted by-laws about village sanitation, vaccination and inoculation. Another society has adopted rules about whitewashing the houses at least once a year, disinfecting the drinking wells and frequent washing of clothes and general cleanliness. It is reported that in 1936, 131 ceremonies were performed in the societies in Jullundur. 60 of these were marriages, 45 births, 15 deaths, 2 circumcisions and 9 others. The estimated expenditure amounted to Rs. 13,670 as against Rs. 33,622 on previous standards. Therefore Rs. 19,952 have been saved to the members. This is no mean achievement for the societies. There are 38 societies in Hoshiarpur and 1219 members.

Ferozepur has made noteworthy progress during the course of the last year. The number of societies has increased from 15 in 1935 to 36 in 1936, with a membership of 2258. The societies have adopted rules for rural uplift relating to the removal of refuse, pitting of manure, sanitation, fixing of ventilators, combating of epidemic diseases among cattle, checking of illicit distillation, discouraging of litigation, gambling and theft. A few societies have resolved not to allow women to go to the market for shopping and thus control the shop credit. One society has constructed a pit for disinfecting of cattle to prevent foot and mouth disease. In 31 societies 1051 manure pits have been dug, 4684 ventilators affixed, 218 feet pacca drains and 357 sinks made. 4 societies have filled up pools of stagnant water, which previously served as breeding places for mosquitoes. In 8 villages 15 wells for drinking purposes have been repaired. 2 societies have constructed 8 bore-hole latrines for the use of women.

But the most interesting aspect of the work in Ferozepur District is the scheme evolved to render First Aid to animals. 4 centres have been started for this purpose. Members interested in the work were given training at 5 centres by the Civil Veterinary Department and 63 persons were thus trained to act as First Aid workers. This is a new phase of useful work for co-operative societies and requires encouragement and support.

The special feature of Lahore is the one Better Living Union in Chunian Tehsil. It is described in detail elsewhere. In 1936 seven societies in Chunian circle adopted resolutions for ventilation, digging of manure pits and prohibiting drinking, preparation of illicit liquor and theft. Rural reconstruction has been started in right earnest and the ground for it has been well-prepared.

Amritsar now claims 25 societies, with 944 members. It is attaching importance to the consolidation of the position already gained than to rapid expansion. The new societies are started only in villages where representatives of all communities, irrespective of class or creed, join the society. This is no doubt a sound policy and is sure to result in the advancement of the whole village. There are 4 societies of sweepers in Amritsar city. They have banned the social evil of trade in women and gambling and also made it obligatory for their members to bathe twice daily in summer and once a day in winter. 3 societies control beggary and in this connection one society has levied a tax of 4 annas upon beggars for each visit they pay to the village. Two private girls schools have been started in two societies and one has started a games club. Two villages with good better living societies were awarded prizes for standing first in the District Sanitation Tournament in 1936.

Muzaffargarh, which is one of the most backward district in the province, has made remarkable progress in the sphere of better living. The number of societies has gone up from 21 in 1935 to 42 in 1936, and membership from 1048 to 1666. The average membership per society is 47, which is far above the provincial average of 39. Almost all societies have taken up rural reconstruction programme. The district has a special staff of one Inspector and 2 Sub-Inspectors. The special feature of the last year's working was the attention paid to the popularising of improved seed. It is asserted that the expenditure on marriage has gone down as low as Rs. 16 as against the minimum expenses of Rs. 200 in the past. If these figures may be relied upon the reduction is creditable for the societies. Dera Ghazi Khan, the district adjacent to Muzaffargarh, but situated on the other side of Sind River, records 22 societies and 1296 members. There has been an addition of only one society last year.

15 societies exist in Sargodha. 10 of these follow village uplift programme. The number of societies is at a standstill for want of a special staff. Gujrat has 33 societies. 18 of these insist on social and moral uplift and the use of improved seeds. Attock with its 10 societies is stagnant, although the average membership per society is as high as 60. Moreover 94 credit societies have introduced moral by-laws, which is a fairly large number. Mianwali shows small improvement having increased the societies from 2 to 5 last year and membership from 35 to 226.

The number of societies in Montgomery has risen from 23 to 30 in one year and membership from 787 to 1055. The district has one special Sub-Inspector. The members are attempting to keep their villages clean. Multan continues to have 5 societies, the same as before, with 312 members. One society has established a seed agency of the Agricultural Department.

Gujranwala claims 30 societies and Sheikhupura only 4. Gujranwala concentrated its activities to one particular area—Wazirabad, where one special Sub-Inspector was appointed. Intensive work was undertaken at Jatti Shah Rahman which was made a model village. Special emphasis was laid on the provision of co-education, construction of circular roads round the village, planting of trees on the roads and keeping a bull of approved pedigree.

Sialkot is notorious for its heavy expenses on ceremonial occasions and extravagant habits of its people. Therefore its pressing necessity is to have a special staff for pushing on the formation of better living societies. It has only 23 societies. One of these is exclusively for women. The societies are, however, practically dormant.

Gurdaspur made some progress last year and increased its societies from 37 to 47, and membership from 934 to 1212. One society at Khuthi won a prize of Rs. 600 for doing splendid work for the improvement of village sanitation. The Nawanpind Society was also awarded the first prize in the Tehsil competition. Two other societies were given prizes for good work in rural reconstruction. Thus the societies have succeeded in winning public opinion in their favour for the enthusiasm shown by them in the rural uplift work.

This rapid survey of the multifarious activities of these societies in the districts will demonstrate the good work which they are performing. They have created a strong desire in the minds of the villagers to improve their condition and have succeeded in arousing them from their age-long slumber and lethargy.

The Handal Co-operative Better Living Union

The working of the better living societies in certain compact areas independently has shown certain weaknesses and has necessitated their federation into a Union. This necessity was felt as long ago as 1929 and the first Co-operative Better Living Union in the Punjab and in India was formed at Handal in

Lahore District. This union was registered on 9th May, 1929 with its headquarters at Handal and with Chunian Tehsil as its area of operation.

Objects.

The objects of this union are to facilitate the operations of registered co-operative better living societies and more particularly:—

(1) to reform bad and maintain good customs amongst the members of affiliated societies;

(2) to prevent the waste of money and inculcate habits of thrift;

(3) to improve the moral and intellectual condition of members;

(4) to provide educational assistance to the children of the members of affiliated societies;

(5) to adopt measures for improving sanitation in villages where affiliated societies operate;

(6) to promote other measures designed to encourage in the members the spirit and practice of thrift, mutual help, and self-help and the eradication of evil customs and habits.

The main object of the Union is to co-ordinate the activities of the better living societies, which are its members, and to carry on propaganda for rural reconstruction. It also helps in deciding disputes which the societies find difficult to handle.

Membership.

Its membership is confined to registered co-operative better living societies in Chunian Tehsil. There are only 10 better living societies which are affiliated to it. Some other societies which are situated in the area of the operation of the Union, are not yet its members. The admission fee is 8 annas.

Liability.

The liability of each member for the debts of the Union is limited to Rs. 20 only.

General Meeting.

The General Meeting of the Union, among other things, decides about the adoption of customs to be observed and fixing

of the maximum expenditure to be incurred on each ceremonial occasion and also the assessment of contributions to be paid to the funds of the union by each member society. This contribution, however, cannot exceed 1/10th of its (member society) annual income.

Member societies are entitled to be represented at a general meeting as follows:—

1.	societies with 25 members or less	1 representative.
2.	societies with members exceeding 25 upto 50 ...	2 representatives.
3.	societies with over 50 members	3 representatives.

Rule 7(*b*) of the Rules approved by the Punjab Government has been amended in the case of this Union to the extent that for the purpose of this rule the representation of each member society shall be determined according to the by-laws of the Union.

No proxies are allowed, but a member is entitled to send his opinion in writing on any question affecting him under discussion. But this opinion is not counted as a vote. No member is entitled to vote from whom any fine is due to the Union. The General Meeting of the Union is held at the headquarters of the member societies in turn. Last year four General Meetings and 12 Committee Meetings were held.

The Managing Committtee is authorised to hear appeals preferred within two months by a party to the dispute decided by a member society. The Union contains a register of approved customs and approved expenditure on ceremonies.

Communal Society.

The one serious defect in the organisation and working of the 10 better-living-member societies and this Union was that they were confined to one community only.

Of late attempts have been made to induce the societies to admit members of other communities also. As a result one society admitted a person of another community as a member. It is an open secret that if the better living societies and also the Union are to perform any useful uplift work on a general or whole-sale scale it is essential that all the inhabitants of the village, without any distinction of caste or creed, should be encouraged to come in. The Union and its affiliated societies

cannot do any work touching the whole village, so long as they do not cover all the communities of the areas.

Effects.

As already stated, the main original object of these societies was to induce their members to curtail the ruinous expenditure, imposed by customs on occasions of births, marriages, and deaths, and other domestic ceremonies. In places where these societies exist, they have beyond all doubt saved their members many thousands of rupees each year. For example, the members of 14 societies in Jullundur are said to have spent only Rs. 14,000 where they would normally have spent Rs. 40,000. In another instance the savings on previous standards on ceremonies celebrated by members of these societies are estimated as Rs. 23,000. The members of 7 societies in Montgomery saved Rs. 16,000 on 32 marriages. These societies extend their influence on non-members also. For example, in Gujranwala District a non-member was induced to celebrate a marriage in his family according to the rules of the society by the refusal of all the members of the society to attend unless the wedding was celebrated as their society demanded. The danger of these societies is that they may push reform beyond the limits of human nature. There has been a case in which a big landlord prided himself upon having celebrated the marriage of his son for Rs. 11 as against Rs. 10,000 spent on the marriage of his brother before he joined his society. Some of the societies prohibit all expenditure on jewellery, on the ground not only of economy, but still more of personal security, for in some villages the wearing of jewellery is apt to lead to dacoity and murder. The daughter of a member on being told by her father that she would get no jewellery on her marriage insisted upon a *quid pro quo* and was given a deposit of Rs. 1,000 in a central bank. In Jullundur many ladies have sold jewellery and deposited the proceeds in co-operative societies.

Indian Marriages.

Pandit Jawahar Lal Nehru in his Autobiography says, " Indian marriages, both among the rich and the poor, have had their full share of condemnation as wasteful and extravagant display. They deserve all this. Even apart from waste, it is most painful to see the vulgar display which has no artistic or æsthetic value of any kind. (Needless to say there are exceptions.) For all this the really guilty people are the middle

classes. The poor are also extravagant, even at the cost of burdensome debts, but it is the height of absurdity to say, as some people do, that their poverty is due to social customs. It is often forgotten that the life of the poor is terribly dull and monotonous and an occasional marriage celebration, bringing with it some feasting and singing, comes to them as an oasis in a desert of soulless toil, a refuge from domesticity and the prosaic business of life. Who would be cruel enough to deny this consolation to them who have such few occasions for laughter. Stop waste by all means, lessen the extravagance (big and foolish words to use for the little show that the poor put up in their poverty), but do not make their life more drab and cheerless than it is."

Better Living Societies are trying to stop waste on marriages and at the same time make life more happy and cheerful.

Ceremonies and Depression.

As far as pure economy goes, it may almost be said that the whole province is now a school of compulsory education in better living. Therefore there has been a large increase in the number of societies in the past 3 years. This is chiefly due to the economic depression which has taught the people to be thrifty.

So far as the propaganda of better living is concerned the economic depression during the past few years has done more practical good than any amount of persuasion and preaching could have done. Circumstances difficult and unrelenting have demonstrated with singular force tc the people that the key to felicity and prosperity lies in discarding extravagant expenditure and increasing their own earning capacity. The future of such societies now seems to be hopeful. Hence the present is a very good time for pushing on these societies. Let us hope that these plants that flourish in the dry wilderness of scarcity, will not be drowned by the rain of prosperity, should it ever again fall on us.

Better Living Union.

A Union of ten societies was organised in Chunian Tehsil of the Lahore District and one of the main points of the teaching of the Union was that there was no help for it but to go back to the way of living of their fathers 30 years ago. That this spirit is not universal yet is shown by the figures for loans given by credit societies for expenditure on ceremonies, which amounted to Rs. 1·36 lakhs in 1933, Rs. 1·88 lakhs in 1934, Rs. 2·25

lakhs in 1935 and Rs. 2·47 lakhs in 1936. This was 6·63 per cent in 1933, 8·13 per cent in 1934, 8·32 per cent in 1935 and 8·7 in 1936 of the total loans advanced during the year. This indicates that there is still a feeling that economy on necessities of life is good and necessary, as one should spend one's own money on them; but on important occasions like ceremonies one must make good show, and this can be done quite easily by spending borrowed money, which is almost as good as spending nothing at all, and any how, repayment need not be thought of yet.

Influence.

Nevertheless the societies are extending their influence slowly and steadily and people are beginning to realise the immense good these societies can do.

For where better living societies are not in existence, the difficulties confronting the people to overcome the prevalent customs are indeed great. A man who refuses to spend lavishly on a wedding is liable to get black looks from his guests, who feel that he has given a poor return for their lavish expenditure in the past. Until the people, as a whole, come to recognise the futility of wasting money on such ceremonies it is impossible to expect individuals not to be wasteful. The better living societies can help in this work. And once a man has been bold enough to overcome the force of custom there is little doubt that he is grateful for the opportunity afforded to him of practising some economy in the celebration of a ceremony.

In 1930 a special enquiry was made in forty-eight villages, mostly in the canal colonies, to ascertain the amount spent at marriage upon jewellery during the last three years. In forty villages the average came to Rs. 416 per marriage, and in the remaining eight, where all had Better Living Societies, to only Rs. 103. In Montgomery, several societies have imposed a limit of Rs. 300 for a marriage where Rs. 2,000 used to be spent. Near Lahore, the Sikhs of Chunian have persuaded their women-folk to reduce their marriage expenditure on jewellery from Rs. 2,000 to Rs. 500; but before the women would agree, they made their bibulous husbands take the pledge of reducing expenditure on drink. In general, these societies reduce marriage expenditure by from 50 to 75 per cent and as this kind of expenditure is one of the main causes of debt, their advantage is obvious.

The Registrar in his report for 1933 makes very interesting and instructive remarks about these societies. He says, " The

energies of these societies are concentrated mainly on the reduction of expenditure on ceremonies, that such expenditure has in the last year or two been drastically curtailed is an undoubted fact, but how much of the reduction is due to the preaching and practice of these societies and how much to the shortage of hard cash is a debatable point. The villager had some reason on his side when he met the better living propagandist with the question. Where were you when our pockets were full? What is the use of this sermon now when we are broken? " Nevertheless the preaching itself is of value for the future.

The societies hitherto formed have had as their main object the reform of social customs and the reduction of unnecessary expenditure on such customs. This is a very necessary reform which has been substantially aided by the straitened circumstances in which agriculturists, artisans and persons of limited means have found themselves in the last few years; but the adoption of this as the main object of societies has had one unfortunate effect in that it has encouraged the formation of societies on strictly communal lines, since a society of mixed communities finds it difficult to lay down rules which will be binding on all members. Efforts have been made in recent years to induce all societies to adopt rules having as their object-general improvement in the standard of village life, and for this purpose rules have been revised with the assistance and advice of the Commissioner, Rural Reconstruction, as stated before.

Local Conditions.

Local conditions and character also influence the nature of progress which these societies undertake. Thus in Amritsar a number of societies have special provisions against illicit distillation; the hill societies of Kangra lay special emphasis on measures of personal hygiene; societies in the Western Punjab have set their face against the custom of women attending fairs, a custom which seems harmless enough, but is viewed in these parts with great suspicion. It is an open secret that a better living society has little chance of success if it does not enlist the sympathies of the members' wives.

The reduction of expenses on ceremonials is common to nearly all societies, and measures of village sanitation are becoming more and more wide-spread.

An instance of the new attitude towards expenditure is quoted from Nawan-shahar Tehsil, where a member of a Better Living Society received Rs. 1400 from the bridegroom's father for his daughter's marriage and when this came to the notice of

the Committee of the society, he was made to disgorge the whole amount which was then placed in fixed deposit in the local credit society in the name of the girl herself. The increased interest in sanitation was demonstrated in Hissar by the Better Living Societies of that district holding a clean village competition.

Village Uplift.

In addition to the curtailment of useless expenditure on social ceremonies and reformation of bad customs, these societies are devoting their attention to matters of sanitation, compulsory vaccination and inoculation, ventilation of houses, prohibition of opium, illicit distillation, cleanliness of clothes and person. Some have levelled and paved and swept the village lanes; a few have employed sweepers to clean the streets every day; some have repaired and roofed the village drinking wells; some have caused the villages to improve the ventilation of houses by making windows and ventilators; pitting of manure is now a common provision in almost all the societies; and in a village a public-spirited man has given land near the village site for the pitting of manure to those whose land was far away. But it is no easy matter to get people to deposit their manure in pits of their own accord and it is after much teaching and persuasion that people agree to this.

Activities.

The activities of these societies are most diverse. One insists upon inoculation against plague; another has filled up three malodorous ponds and set up hand pumps to facilitate the supply of good drinking water; others distribute quinine and soap and disinfect wells; and two for criminal tribes prohibit the eating of dead animals. Perhaps the most curious is a society of Chamars in Gurgaon District which has too rules: one, that members should wash their clothes once a week and for this soap is purchased by the society and distributed to the members; the other, that they should brush their teeth once a day. Seven societies in Toba Tek Singh bind their members not to keep cattle in their houses and others in Lyallpur are taking measures for killing rats and stray dogs, disinfecting houses, walling in tanks and wells, and helping vaccination. In some societies the members have taken a pledge to have themselves and their families inoculated against epidemics. Some societies take practical measures to protect crops from stray

cattle and pilfering persons; Gurdaspur organised a successful campaign against the damage done by cattle straying into crops by engaging a guard and the saving on one crop was estimated at Rs. 500; there are others which promote physical strength by wrestling matches.

Several villages in which societies have been formed have won prizes in district sanitation competitions and other instances of their activities are the running of a small library in a Ludhiana society, the construction of a footpath for cattle in a Ferozepur village as a preventive of foot and mouth disease, the organisation of two private schools for girls in Amritsar societies and sports club in several districts.

Help by Central Banks.

All central banks and unions also are impressed to realise the great importances of spreading by all means possible knowledge of the effective ways of preventing and curing epidemics, particularly malaria, a disease which costs the province many lakhs of rupees and many lives every year.

Apart from joint action to fill up holes, ponds, etc., which contain stagnant water and are the breeding places of mosquitoes, by far the most effective prevention of malaria is the mosquito-net. In order to popularise nets the Industrial Co-operative Societies in the Punjab have produced a cheap and a durable mosquito-net costing Rs. 1/8/- per net. All central banks and unions are induced to obtain samples and do their best to popularise these nets in villages and towns. They help by collecting indents from their affiliated societies. In addition to this, credit societies in malarial districts are encouraged to purchase quinine and supply it by a debit to loan accounts if necessary to their members in the malaria season.

The Ramdiwali Union in Amritsar district has set a very good example by allotting Rs. 100 as prizes for better living societies in its area. This ought to create a healthy rivalry among the societies.

Better Living Staff.

Recognising the importance of these societies in the sphere of rural reconstruction, the Government has sanctioned a separate special staff of 4 Inspectors and 16 Sub-Inspectors last year for Better Living Societies. The number of Sub-Inspectors was subsequently increased to 23. The four Inspectors have been posted in Ludhiana, Ferozepur, Lyallpur and Muzaffargarh

districts. The 23 Sub-Inspectors are working in Lahore, Ferozepur, Amritsar, Gujranwala, Montgomery, Multan, Lyallpur, Jhang, Muzaffargarh, Dera Ghazi Khan, Jhelum, Attock, Ambala, Ludhiana, Hoshiarpur and Jullundur districts. The result of this additional staff is already apparent in the rapid increase in the number of societies started during the course of the last year. These societies now lay particular emphasis on the various aspects of the programme of rural reconstruction. The policy is to encourage each society to adopt only such parts of that programme as it is willing by its own efforts to enforce; the societies as they grow older and stronger gradually extend the scope of their work.

Credit Societies: Common Good Fund.

A good many credit societies have an extra by-law laying down certain rules akin to those of a better living society.

Moreover the accumulated common good funds in credit societies are being used for the uplift of the villages on a variety of objects, *i.e.*, the engaging of a sweeper for village lanes, paving of streets, repairing of wells, fitting of pumps, construction of tanks and a small bridge, improvement of roads, drainage, guest houses and free medicines. Stipends have been paid to poor students, both boys and girls, and books purchased for them. Contributions have been made for the building of schools and hospitals. In a horse breeding area money was given for the expenses of a village horse show. Two societies have purchased sets of standard weights which have begun to be used by the members to weigh their produce before taking it to the market. Two Unions in Hoshiarpur have engaged a qualified nurse each out of their common good fund.

The Ramdiwali Union in Amritsar district resolved to engage a lady Health Visitor to train local *dais* in up-to-date midwifery methods. This Union had to give up the important task of social reform and rural uplift for lack of a suitable woman worker which it could not find despite the offer of a handsome salary. The Union has purchased a radio and installed it at Mothewal. Rs. 15,000 were contributed by Co-operative Societies in 1930 to help the members of flood-stricken areas. The societies rose to the occasion and contributed their quota towards the relief of sufferers in Bihar and Quetta.

Single Caste Societies.

Most of the societies are restricted to a single caste where the only object is to curtail expenditure on social ceremonial;

it is natural that a society should be restricted to those whose ceremonies are identical. But where the aim is to develop better conditions of life for the whole village, this is a disadvantage, and it is hoped that in future more and more societies will be organized on a non-communal basis.

Fines.

Every breach of rules is punishable by fine. Fines have actually been imposed and recovered in a good many cases. But in some societies the rules are said to be infringed with impunity and no fines imposed, which is a reminder that societies find it easier to adopt a rule than to enforce it, and in others the fines that are imposed are often not paid; and here again speech is silver, for apologies have often been accepted in place of money and the offender has been let off. There is plenty of room for doubt as to the efficacy of fines in a matter of this kind, and for preferring the effect of continuous teaching and the social pressure of the society and its more enlightened members. But when all lapses have been fully discounted there remains a solidity of achievement which is full of promise for the future and striking evidence of the growing desire in the village for the better kind of life than has been possible in the past.

Conclusion.

Eventually it is to be hoped that such organizations will create so strong a public opinion that they will be able themselves to carry on this campaign; but in the initial stages it cannot be doubted that there must be an adequate local staff to organise them, advise them and supervise their detailed working. If only more money and staff could be made available much more might be done along these varied lines for the rural reconstruction of India, because public opinion in the countryside is getting strongly in favour of reform and this is the most precious time to take advantage of this golden opportunity.

AN INQUIRY INTO SUB-DIVISION AND FRAGMENTATION OF HOLDINGS

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The inquiry was carried out in the years 1934 and 1935. Taking advantage of the appointment of a committee by the Government of Mysore to make a report on the extent of sub-division and fragmentation in the State a detailed study of individual villages in certain taluks was made. The agency utilised for the collection of data was the Revenue Department. For the investigation of sub-division of land, statistics of 80 villages in 18 taluks were collected; for the investigation of fragmentation of land, statistics of 100 villages in 19 taluks were collected. In all these areas the Regulation in regard to the record of rights was in operation and there was a unique opportunity to make a scientific study of holdings and the terms and conditions in which they are held. It is claimed for the present inquiry that it goes far beyond the usual scope of such studies which are limited to a village or two and that the primary data regarding sub-division and fragmentation, based as they are on the record of rights, are as reliable as they possibly can be. The conclusions reached in the inquiry have thus attained a large measure of scientific precision and accuracy. The inquiry covers a very wide field and the statistics directly drawn from the record of rights are a faithful and accurate representation of the actual state of affairs.

The Mysore Revenue System is based on the Bombay Revenue System. Its main features may be briefly described. The raiyat deals directly with the Government without the agency of a middleman. His tax is fixed for a term of 30 years and so long as he pays it he cannot be dispossessed of his land. The unit of assessment as also the minimum unit of holding which in theory is the area that could be cultivated with one pair of bullocks is the Survey Number. The person responsible for the land revenue of the holding is the individual whose name is entered in the Government records as its holder. His short name is the 'Registered Occupant.' His name is also entered

in the Shanbhog's Khate or ledger—hence the title of Khatedar is given to the holder. In default of payment of the *khandayam* or land revenue the Government will proceed against the Khatedar with pains and penalties.

The original surveys were made forty years ago. Unfortunately in the intervening period many changes have occurred which have made the system lose much of its reality and many of its advantages. Inheritance, partition, sale, gift, lease and mortgage are frequent happenings and their net effect has been to make each Khate represent, not one holder, but a host of interests. Revenue authorities assert that it is rather the exception than the rule to find the Khatedar owning the lands inscribed against his name in the register. In course of time the Khatedar becomes a fictitious personality while *anubhavadar*, that is, the actual possessor may be a son, or a nephew, or vendee or a mortgagee. The Hissedars or the owners of fractions of a survey number find themselves in severe difficulties: they have to pay their dues through the Khatedar and even supposing the dues are paid their land is not safe from sale so long as a co-sharer or co-occupant is in default. The raiyatwari system is thus shorn of its features and we cannot say that under these conditions the raiyat deals directly with the government, that he can relinquish his land at will or that he is not responsible for the payment of anyone else. There is confusion in the Shanbhog's accounts arising out of the posting of individual debits and credits, shares of interest, notice fees, etc., for these owners of fractions of survey numbers, a confusion which gives opportunities for fraud and manipulation of accounts. Moreover combining many persons into one Khate does not make for ease of collection. Neither does the system yield reliable information regarding the average size of holdings, the amount of sub-division of land, the extent of fragmentation, the area rented or mortgaged, the proportion of land held by moneylenders and the volume and nature of agricultural debt.

For all these evils the Record of Rights was devised as a remedy. It was first introduced in Bombay in 1913 by Sir George Curtis, formerly Director of Land Records and later member of Executive Council, Bombay.

In Mysore a 'Regulation to provide for the preparation and maintenance of a Record of Rights' was passed in 1927. It was put into operation in certain specified areas. The Regulation has now been in force in 19 taluks.

The Record of Rights is a register giving particulars of all private rights over land, whether they have been acquired by

registered or unregistered document, by succession or by oral agreement. These private rights may belong to owners, occupants, mortgagees, tenants or assignees of the rents. Every separate occupancy within the survey number will be registered and given separate recognition, that is to say, any share or sub-division of a holding, if separately owned and cultivated, however small it may be, is recognized in the official diary. As the revenue accounts are based on the Record of Rights it serves as a record of liabilities as well; and the occupant of each separate occupancy will be held directly liable to Government for the assessment of the land actually held by him. The result will be the disappearance of those Khatedars who are not actually in possession of the land recorded in their name—there will be no Khatedarship apart from actual occupancy. The survey number ceases to be the unit for revenue purposes, each separate occupancy, however small, being given a distinct assessment.

Under the enactment it is incumbent on every man who acquires any right to report the matter to the Government authority within a period of three months, under pain of a fine of Rs. 25. The plaintiff in every suit in a village is required to submit a certified copy of the entry in the Record of Rights relating to the land in dispute.

The Record of Rights is intended to check litigation in respect of land and facilitate its disposal by the courts; to reduce unnecessary expenditure by the raiyats in executing and registering documents; and to protect them against fraud and fabrication of false claims. It will also be of great assistance both to Government and raiyat in the distribution of Takkavi loans and the grant of suspensions and remissions of land revenue. Sir James Monteath thus sums up the usefulness of the Record of Rights, " The advantages of a correct Record of Rights are almost inestimable. The security and certainty of title which such a record gives raise the value of land and at any rate check forced sales of it for utterly inadequate prices from which large numbers of cultivators now suffer much loss; they induce loans to be made at reasonable rates instead of the ruinous rate so common; they minimise land litigation leading often to hopeless bankruptcy, and make such litigation when undertaken, more speedy and less expensive."

Sub-division and fragmentation must be distinguished from each other. By sub-division we understand the distribution of a land of a holder among his successors. Sub-division may be due to the action of the laws of inheritance or it may be brought about by means of exchange, gift or sale.

By fragmentation or *morcellement* as it is sometimes called, we mean the manner in which the land held by an individual is scattered in a series of plots, one separated from another. Fragmentation is chiefly due to the method by which property is distributed amongst the heirs, each heir getting a proportionate share of each item of the different kinds of land devolving upon them. Each plot of land may vary in quality; and equity requires that each plot must be divided up among the shares. The tendency to fragmentation is emphasized by purchase and sale, and where there are no direct heirs by the division of property amongst the relatives.

At each partition of land there is likely to be both sub-division and fragmentation—the holders will receive a smaller and smaller share of the land and they will receive their individual shares into smaller and smaller plots.

Sub-division of holdings in the areas under investigation:—

Statement No. I shows the size of holdings, that is, the extent to which sub-division has spread. The percentages of holdings of different sizes are as follows:—

(*a*)	Less than 1 acre	20·9 per cent.
(*b*)	Between 1 acre and 5 acres	39·8 per cent.
(*c*)	Between 5 acres and 10 acres	18·8 per cent.
(*d*)	Between 10 acres and 25 acres ...	14·9 per cent.
(*e*)	Between 25 acres and 50 acres ...	4·1 per cent.
(*f*)	Above 50 acres	1·5 per cent.

It will thus be seen that holdings of the size of 10 acres and below form 79·5 per cent. It is obvious that the evil of sub-division has not attained the importance that it has in parts of British India. The Census Report of 1931 for British India states, "If a comparison be made between the area of land under crops and the number of agriculturists actually engaged in cultivation, the result found for British India is that for each agriculturist there is 2·9 acres of cropped land, of which 0·65 of an acre is irrigated. The corresponding figures for 1921 are 2·7 and 0·61. If however we take only the figures of owner and tenant cultivators, excluding rent-receivers, agents and agricultural labourers, we find that each cultivator has 4½ acres to cultivate and of irrigated land, excluding in this case the Jhumiyas (cultivators of shifting areas), each cultivator has just over an acre."

Fragmentation of holdings in the areas under investigation:—

Statement No. II reveals the extent of fragmentation in the taluks under investigation. The percentage of holders having their holdings in one or more plots is as follows:—

(*a*) In one plot	... ...	43 per cent.
(*b*) Between 2 to 5 plots	...	42·4 per cent.
(*c*) Between 6 to 10 plots	...	11·3 per cent.
(*d*) Above 10 plots	... ...	3·3 per cent.

It will be seen from the Table that the bulk of the holdings fall into (*a*) and (*b*) classes, thereby showing that fragmentation has not become a serious evil. It must be pointed out that in many villages in Mysore there are three kinds of land, namely, dry, wet and bagayet or garden; therefore a person owning a piece of each of these lands is not necessarily at a disadvantage. On the other hand he is in a position to grow a variety of crops on the different blocks into which his holding is split up and thus keep himself and his stock continually employed on the land.

It is to be noted further that fragmentation does not prevail in the dry lands to the same extent as in wet and garden lands. There is more marked *morcellement* in malnad or hilly parts than in maidan or plain areas of the country because in the former the wet and garden lands predominate.

STATEMENT I

STATEMENT SHOWING THE EXTENT OF HOLDINGS

Serial Number.	Taluks.	Villages.	No. of holders in the village.	No. of holders who own less than one acre.	No. of holders who own between 1 to 5 acres.	No. of holders who own between 5 to 10 acres.	No. of holders who own between 10 to 25 acres.	No. of holders who own between 25 to 50 acres.	No. of holders who own above 50 acres.
1	2	3	4	5	6	7	8	9	10
1	Bangalore ...	Varthoor	119	16	68	27	6	2	
2		Yelahanka	228	67	123	29	8	1	
3		Hebbal	121	53	49	12	5	1	1
4		Gunjur	332	51	196	55	28	1	1
5		Hesaraghatta	410	201	168	32	8	1	
6	Closepet ...	Bannigiri	144	30	63	34	13	3	1
7		Gopahalli	221	36	86	56	35	7	1
8		Kenchaganahalli	203	26	106	50	18	3	
9		Banandur	228	26	104	58	34	2	6
10		Kenchanakuppe	177	26	123	22	3	3	
11	Chennapatna ...	Mynayakanhalli	480	140	243	75	20	2	
12		Sagala	294	73	141	53	25	2	
13		Mangalvarpet	430	141	208	66	15		

14		Malur ...	...	632	180	297	140	15		
15		Nagavara	...	375	130	190	50	5		
16		Santhemugenahalli	...	200	15	128	45	12		
17	Kolar ...	Dimbachanahalli ...	...	62	23	27	11			
18		Vakkaleri ...	...	155	47	72	23	11	2	
19		Sugatoor ...	...	157	37	91	20	7	2	
20		Kallahalli ...	...	127	37	70	14	6		
21		Halesomarasanihalli	...	90	30	50	8	2		
22		Nukkanahalli ...	...	118	36	55	15	11	1	
23	Sidlaghatta ...	Appegowdanahalli		122	21	71	18	11	1	
24		Palioherlu ...	...	108	25	59	17	7		
25		Goramaduga ...	...	94	19	56	13	6		
26		Kothanuru ...	...	138	20	75	19	13	2	1
27		Seegehalli ...	...	126	30	61	29	5	1	
28	Chikballapur ...	Posettihalli ...	...	85	34	43	7	...	1	
29		Harohondi ...	...	170	4	130	35	1		
30	Tumkur ...	Bannikuppe	...	104	9	43	26	19	6	1
31		Tumkur ...	...	378	113	173	72	18	2	
32		Kolihalli ...	...	181	29	109	29	11	3	
33		Siravare ...	...	218	8	55	70	84	1	
34		Honasigere ...	...	144	8	86	35	14	1	
35		Brahmasandra ...	...	208	43	110	48	7		
36	Seringapatam	Subbanakuppe ...	...	149	44	76	22	6	1	
37		Chimenahalli ...	...	178	39	102	18	17	2	
38		Bonthagalli ...	...	76	10	35	18	12	1	
39		Chandagal ...	...	132	19	72	23	15	2	1

Serial Number.	Taluks.	Villages.	No. of holders in the village.	No. of holders who own less than one acre.	No. of holders who own between 1 to 5 acres.	No. of holders who own between 5 to 10 acres.	No. of holders who own between 10 to 25 acres.	No. of holders who own between 25 to 50 acres.	No. of holders who own above 50 acers.
1	2	3	4	5	6	7	8	9	10
40	Alur ...	Hosur	68	22	35	11			
41		Koralu	79	11	35	17	16		
42		Muradur	51	8	27	12	4		
43		Morasu	161	55	62	25	15	4	
44	Manjarabad ...	Halasulige	31	9	14	5	2	1	
45		Masavalli	16	3	6	4	3		
46	Arkalgud ...	Chik-Arkalgud	220	154	27	33	6		
47		Shanbhuthanapra ...	49	9	33	6	1		
48		Kolvoyhantha	259	138	7	6	8		
49	Sorab ...	Halasinkoppa	29	2	18	6	2	1	
50		Nadahalli	34	4	9	5	12	3	1
51		Kanthanahalli	25	...	7	11	5	1	1
52		Urugnahalli	34	9	15	7	1	...	2
53		Shiravanthe	46	28	13	3	1	...	1
54		Thalkalkoppa	29	8	15	5	1		

55	Davangere ...	Mayakonda	243	175	29	22	14	3	
56		Lokikere	238	5	66	58	84	29	8
57		Kodagorur	230	1	67	69	62	25	6
58		Malegondahalli	152	4	18	44	69	14	3
59		Kadalabal	79	3	11	16	32	14	3
60		Anaji	273	20	96	56	74	22	5
61	Harihar ...	Malebennur	177	4	58	52	55	7	1
62		Kumbalur	137	4	19	39	49	21	5
63		Nandigani	51	1	17	11	19	1	2
64		Belludi	181	42	46	50	85	7	1
65		Bamikadu	144	4	29	35	66	8	2
66		Rajenahalli	67	1	19	16	19	9	3
67	Holalkere ...	Thalya	235	13	107	62	34	13	6
68		Chikjajur	191	7	59	57	54	11	3
69		Dumini	256	20	88	95	44	6	3
70		Holalkere	535	18	189	205	105	15	3
71	Chellakere. ...	Heggere	216	11	69	35	81	19	1
72		Parusarampur	220	16	95	28	45	21	15
73	Molakalmuru...	Chikobanahalli	47	5	1	11	12	17	1
74		Bommakkanahalli ...	57	2	14	13	22	4	2
75		Sanikere	35	...	3	4	14	11	3
76	Chitaldrug ...	Doddasiddakkanahalli ...	800	20	110	212	292	126	40
77		Dyanakkanahalli	536	8	37	97	353	23	18
78		Alaghatta	180	19	50	57	46	7	1
79		Janakonda	219	16	118	55	21	7	2
80		Manangi	155	12	68	36	36	3	

STATEMENT II

Statement Showing the Extent of Fragmentation of Holdings in the State

Serial No.	Taluks.	Villages.	No. of holders in the village.	No. of holders having their holdings in one plot.	No. of holders having their holdings in 2 to 5 plots.	No. of holders having their holdings in 6 to 10 plots.	No. of holders having their holdings in more than 10 plots.
1	2	3	4	5	6	7	8
1	Bangalore ...	Varathoor	119	44	70	3	
2		Yelahanka	228	107	117	3	1
3		Hebbal	121	60	54	7	
4		Gunjur	332	158	125	36	13
5		Hesaraghatta	410	206	189	10	5
6	Closepet ...	Bannigiri	144	50	45	33	16
7		Gopahalli	221	60	88	40	33
8		Kenchagaranahalli ...	203	64	92	32	15
9		Banandur	228	59	93	46	30
10		Kethohalli	115	51	58	4	2
11		Kenchanakuppe	177	60	84	29	4

12	Channapatna ...	Mynayakanahalli ...	480	150	306	22	2
13		Sogala	294	84	159	37	14
14		Mangalvarpet	430	179	194	53	3
15		Malur	632	110	306	210	6
16		Nagavara	375	5	195	145	30
17		Santhemogenahalli ...	200	53	108	50	9
18	Kolar ...	Dimbachanahalli	62	19	32	9	2
19		Vakkaleri	155	69	59	25	2
20		Sugatoor	157	87	60	9	1
21		Kallahalli	127	53	61	10	3
22		Halesomarasanahalli ...	90	27	43	19	1
23		Nukkanahalli	118	62	44	6	4
24	Sidlaghatta ...	Appegowdanahalli ...	122	64	44	10	4
25		Palicherlu	108	37	47	19	5
26		Goramadagu	94	53	30	10	1
27		Kothanuru	138	80	45	12	1
28		Gejjiganahalli	51	23	21	6	1
29		Seegehalli	120	43	43	25	15
30	Gudbanda ...	Gudibanda	204	116	80	6	2
31		Amanibyrasagara... ...	365	193	145	16	8
32		Kariganthammanahalli ...	88	35	43	2	8
33		Kadehalli	140	67	50	10	13
34		Hampasandra	144	44	81	11	8
35		Doddamacherlu	178	43	90	36	9
36	Chikballapur ...	Posettihalli	85	34	45	5	1
37		Kalavara	247	37	139	67	4
38		Manchibilikere	227	61	59	63	44
39		Harohondi	170	71	76	11	12

Serial No.	Taluks.	Villages.	No. of holders in the village.	No. of holders having their holdings in one plot.	No. of holders having their holdings in 2 to 5 plots.	No. of holders having their holdings in 6 to 10 plots.	No. of holders having their holdings in more than 10 plots.
1	2	3	4	5	6	7	8
40	Tumkur ...	Bannikuppe	104	36	37	21	10
41		Tumkur	378	249	110	18	1
42		Kolihalli	181	84	75	19	3
43		Siravare	218	83	103	22	10
44		Honasigere	144	45	82	15	2
45		Brahmasandra	208	104	96	8	
46	Seringapatam	Sobbanakuppe	149	45	66	30	8
47		Chinnanahalli	178	65	79	21	13
48		Bonthagalli	76	21	49	5	1
49		Chandagal	132	72	49	8	3
50	Manjarabad ...	Halasulige	31	10	14	7	
51		Masavalli	16	8	5	3	
52		Agani	41	17	18	6	
53		Thyamanahalli	36	11	23	2	
54		Agalihatti	31	9	19	3	

55	Alur	Hosur	68	19	18	22	9
56		Karalu	79	13	16	24	26
57		Muradur	51	20	14	14	3
58		Morasu	133	53	64	12	4
59	Arkalgud	Chick-Arkalgud	220	62	93	43	22
60		Shambhuntapur	49	15	14	13	7
61		Kolvoyhantha	259	129	121	7	2
62	Sagar	Chicknur	55	10	24	16	5
63		Adasanthe	63	28	29	6	
64		Shuntikoppe	64	23	21	12	8
65		Tadagalale	40	10	19	5	6
66		Sangela	86	38	39	5	4
67		Kanle	79	33	41	4	1
68	Sorab	Halasinakoppa	29	25	13	1	
69		Nandahalli	34	10	12	3	9
70		Kanthanahalli	25	12	5	7	1
71		Uragenahalli	34	8	16	9	1
72		Shiravante	46	22	23	1	
73		Thalalkoppa	29	3	11	6	9
74	Narasimharaja-pura.	Mangalapur	14	10	4		
75		Salur	12	7	5		
76		Nelagadde	33	7	18	8	
77		Karekesar	13	3	9	1	
78		Alahalli	16	6	10		
79		Horavari	18	8	9	1	

Serial No.	Taluks.	Villages.	No. of holders in the village.	No. of holders having their holdings in one plot.	No. of holders having their holdings in 2 to 5 plots.	No. of holders having their holdings in 6 to 10 plots.	No. of holders having their holdings in more than 10 plots.
1	2	3	4	5	6	7	8
80	Davangere ...	Mayakonda	245	146	91	6	
81		Lokikere	238	104	121	9	4
82		Kodagurur	230	132	91	7	
83		Malagondanahalli	152	103	47	2	
84		Kadalbal	79	47	29	3	
85		Anaji	273	159	104	7	3
86	Harihar ...	Malebennur	177	133	43	1	
87		Kumbalur	137	67	58	12	
88		Nadigavi	51	31	15	4	
89		Belludi	174	85	85	4	
90		Bannikadu	144	83	56	5	
91		Rajanehalli	67	30	33	4	
92	Holalkere ...	Thalya	235	106	109	17	3
93		Chickjajur	191	111	72	8	
94		Dumini	256	98	144	13	1
95		Holalkere	535	315	193	23	4

96	Chellakere ...	Chellakere ...	...	140	108	40	2	
97		Heggere ...	...	216	81	95	30	10
98		Parusarampur ...	...	220	124	85	10	1
99		Balagere ...	...	157	78	74	4	1
100		Memekote ...	...	252	131	105	14	2

AGRICULTURAL DEBT REDEMPTION AND AFTER IN BHAVNAGAR

BY

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Appraising after-effects of redemption premature.

The question of agricultural indebtedness is, at present, engaging the attention of various Provinces and administrations in India. Naturally, therefore, the practical manner, in which Bhavnagar has tackled this problem, has elicited inquiries from many quarters. But if the Bhavnagar experiment of wholesale redemption of agricultural indebtedness has attracted wide-spread public attention, even still greater curiosity has been evinced in numerous quarters, as to the after-effects of redemption, and whether the redeemed Kheduts have given up their past improvident practices. It need hardly be said that the interval, that has elapsed, since redemption was achieved, is not sufficiently long to enable a full and correct appraisement of the after-effects of the wholesale liquidation carried out in Bhavnagar.

Redemption results in easier and better Land Revenue recoveries.

For one thing, there has been a marked improvement in the State Land Revenue recoveries, which are both easier and greater than used to be the case in the past. The State dues nominally enjoy priority over the claims of the private creditors. Yet in the pre-redemption days, the Darbar were more or less cheated of their legitimate dues, owing to the presence of the Sowcar element, which, in spite of all the Darbar's authority and vigilance, succeeded in making prior recoveries.

Twenty-eight per cent of Redemption Loan recovered up-to-date.

Further, the recoveries, towards the debt redemption loan up to 31st October 1936, have amounted to about Rs. 5,75,000 which is nearly 28 per cent of the total advanced. This is not bad, considering the continued economic depression and the catastrophic slump in agricultural prices. This also indirectly testifies to the Kheduts' improved economic condition.

One, no doubt, hears of stray cases of fresh borrowings at usurious rates. But they are very rare. As remarked by Sir P. D. Pattani, in a letter to a friend: "So long as human nature is what it is, there would be always Kheduts ready to incur debts and unscrupulous Sowcars too willing to exploit them by advancing money and entangling them in fresh usurious transactions." But some protection against such future victimization is sought to be given by the Khedut Protection Act, which has been enacted simaltaneously with the practical application of the Debt Redemption Scheme.

Khedut Protection Act—a safeguard against future victimization.

Further, it is hoped that a fair percentage of the redeemed Kheduts are, as a result of the exposures of the Redemption Committees, permanently educated out of their reckless habit of incurring debts, without due regard to their capacity for repayment. This tendency to be economically more provident and circumspect, is indirectly strengthened by the Sowcar's own chariness, at present, noticed to make fresh advances on any large scale. Of course it was not expected that the Sowcar's heart would change overnight; and if he has the opportunity, it is feared that he would not be any less tender in his dealings with the Kheduts. But the exposure of the Sowcar's reprehensible ways, in the course of the Committees' investigations, seems to have had, at least, a temporary salutary effect on that class; and combined with that, the Khedut Protection Act, referred to above, has provided a healthy and much-needed check on the Sowcar's capacity.

Educative value of Redemption.

The Sowcar's chariness to do fresh money-lending on any great scale has, no doubt, resulted in a certain amount of inevitable hardship. But one never knows, if curtailment of credit is after all such a great calamity, as one is apt to imagine theoretically in the case of an ignorant and improvident class like the Indian Khedut who cannot always be trusted to use wisely any undue credit facilities, that may be available for him. Indeed, the report recently submitted to the Government of India by the Reserve Bank (Agricultural Credit Department) appears to favour restriction of credit even to the extent of withholding the right of transfer of land, if only as an intermediate stage to prevent the abuse of credit facilities for non-agricultural and unproductive purposes.

Sowcar's chariness to make fresh advances, a blessing in disguise.

Here in Bhavnagar it has been noticed that the money-lender's chariness in making fresh advances of money and the consequent curtailment of credit has resulted in a most desirable scaling down and reduction of the extravagant scale of social expenditure, in which the Kheduts formerly indulged most extravagantly on festive or funeral occasions. This much-needed reform could not be brought about by mere paper-caste-rules or even by State legislation, and much less by academic preaching and propaganda. But the Khedut's curtailed credit has had this result, to achieve which what are called Khedut Better Living Societies are established in British India, but which, they seldom succeed in accomplishing.

Kheduts in tracts passing through famine conditions show greater resisting power and do not incur debts.

Yet, it may be granted that a small minority will again relapse into the original condition. But so far, nothing of the kind is to be noticed even in the Mahals, which were the first to be redeemed nearly seven years ago, though some of these tracts have had, since their redemption, experience of more than one unfavourable season, the drought of the year before last being particularly very severe. In fact, it was so severe that the whole of the Revenue demand had to be practically suspended, the recovery in many villages being practically nil or not averaging more than two or three annas. Yet the Kheduts have, on the whole, come out well, without being enmeshed afresh in the Sowcar's toils. And the fear entertained in some quarters of the failure of the monsoon starting the whole sad business over again, need not be seriously entertained. The Civil Courts always provide the barometer to test the position in this respect, and so far very few suits have been filed against the Kheduts in the Civil Courts of the State, though in the pre-redemption days, the suits against the Khedut contributed the greater part of the Civil File.

Redemption by itself not enough.

That the Bhavnagar Darbar were never under the delusion that mere redemption of agricultural indebtedness will suddenly improve the condition of the Kheduts, will be evident from the following two extracts taken from the Committee's Report:

"Indebtedness is both a disease and a symptom. So far as it is a disease, it might be amenable to *ad hoc* measures—the treatment must probe deeper, and the question of indebtedness must be considered and dealt along with several other cognate and connected questions. To indicate the nature of these questions

even briefly would be too long a digression here. BUT REDUCED TO ITS SMALLEST PROPORTIONS, THE WHOLE PROBLEM IS OF ENABLING THE KHEDUT TO PRODUCE THE MAXIMUM, HIS LAND AND LABOUR ARE CAPABLE OF YIELDING AND TO REALIZE AND RETAIN THE BEST PRICE FOR THE PRODUCE." (*Vide* page 47 of the *Redemption Report.*)

Needs of complementary measures emphasised.

And again the Committee stress the need of other supplementary and complementary measures in the following words:—

"It was felt and rightly felt that the problem of agricultural indebtedness is not one that can be rightly and separately tackled, without dealing at the same time with the whole economic life of the village. Indebtedness is, after all, a symptom, whose treatment alone cannot achieve the desired object, which is nothing less than the rehabilitation of the whole village life itself, and so the Panchayat is deliberately intended to cover more or less the whole field of village life." (*Vide* page 48 of the *Redemption Report.*)

No doubt, indebtedness has grown to such an alarming extent that its wholesale redemption had become the fundamental condition precedent to the launching of any scheme of rural uplift. But once that object was achieved, there were other aspects of the agricultural problem, which needed to be attended to if the good effected by the preceding redemption was to be consolidated and not frittered away in the course of the succeeding few years. An attempt will be made herein to briefly indicate what these other aspects are, of the agricultural problem viewed as a whole, and further what efforts have hitherto been made to deal with the same in the Bhavnagar State.

Uncertain future no excuse for delaying action clearly indicated by present conditions.

One frequent criticism levelled at the Bhavnagar experiment of wholesale redemption, even while it was being carried out, was that due weight was not attached to the risks of the future implying thereby, that unless the future can be adequately guaranteed and safeguarded, redemption was hardly worthwhile. The obvious reply was that the future must and always remain uncertain to some extent. But because it was so, that could not be made an excuse for refusing the undoubted challenge of the present conditions, which cried for

reform and remedy. And one thought the urgent need of debt redemption was hardly an arguable point. Indeed everybody admits the extent and intensity of agricultural debt; and still if one fights shy of undertaking redemption, it is, the suspicion arises, because of the magnitude of the problem and the huge financial outlay involved.

It might seem paradoxical; but a strange contradictory mental process appears to lie behind this attitude of inaction and hesitancy usually manifested *vis-à-vis* the debt-problem. To quote from a letter of Sir P. Pattani to a friend on the subject: " I am no psycho-analyst; but it is no uncommon experience to find that when one is either unable or unwilling to do a thing, which is otherwise worth doing, one does not always confess one's inability but by a curious psychological process, one is often apt to deceive one's self into the belief that the thing is after all not worth doing at all or that the time is not opportune for doing it. At times, I feel that a similar mental process, though not distinctly recognized, is behind the non-possumus attitude adopted towards the problem of rural debt redemption. While the sub-conscious mind admits the necessity of debt redemption, the conscious mind is frightened by the seeming impossibility of the task and proceeds to justify to itself its attitude of inaction and hesitancy either by denying the problem altogether or belittling its seriousness, or again by conjuring up a picture of the same conditions being reproduced in a few years later the old debts have been once redeemed."

Redemption an essential preliminary step.

But as the Royal Commission On Agriculture most forcibly put it, the worst attitude to adopt towards the debt problem is to ignore it. Moreover, any action in regard to the future would have a fair chance only, after the intolerable present conditions will have been first liquidated. In other words, redemption of old debts was an essential preliminary step, as much as the removal, after an accident, of debris from the tracks of a railway. Of course, the mere removal of the debris would not immediately result in the restoration of the interrupted traffic. Nor was it expected that the liquidation of past debts could, by a miracle, establish the economic prosperity of the Khedut. Other constructive measures had to follow to complete and carry forward the work of economic recovery, for which the necessary initial conditions had been provided by first wiping the slate clean.

As remarked by a reviewer of the Bhavnagar experiment in the ' International Labour Review ' of April 1935, the chief

value of redemption carried out by Bhavnagar lies in that it will have wiped the slate and left it clean for the outline of whatever plan for the reconstruction of rural economy it is decided to undertake.

Futility of legislative enactment to prevent Kheduts from falling into debt again.

It should be stated at the outset that the Darbar lay the greatest store by the institution of Gramya-Panchayat, which they are trying to revive. What is sought to be achieved through these Panchayats is described at length in the body of the Report. With a view to prevent agriculturists from getting into debt again, some advocate the enactment of strong preventive legislation intended to supervise and regulate the internal life of the agriculturist. But the Bhavnagar Darbar do not pin their faith in putting up such artificial dykes to prevent the floods of indebtedness from again swamping the redeemed Kheduts. However well intentioned such legislation may be, the difficulty in its practical enforcement is not always duly and properly considered. Such an attempt to regulate the internal life of the subject, even if it does not actually do more harm than good, will undoubtedly lead to undue harassment on occasions, however vigilant and well meaning the supervising authority may be.

Best safeguard for future would be to build up an economically self-reliant community through Gramya-Panchayat.

The Bhavnagar Darbar prefer to trust to the slower educative value of a self-governing institution like the Gramya-Panchayat. When the same is fully developed, it will, it is hoped, not only be economically strong, but the prevailing public opinion in it will also provide an effective moral check against thoughtlessness and thriftlessness and the too ready tendency to run into debts. But the full development of such a strong and self-reliant community must in the very nature of things be a very slow process.

These Gramya-Panchayats are rapidly multiplying. Only four years ago, the number did not exceed half a dozen, and now in all 84 villages are in enjoyment of village autonomy, and applications are received from 55 more villages for the extension of Gramya-Panchayat to them. Even at the risk of repeating, it will be worthwhile saying that apart from any other direct and indirect benefits of Gramya-Panchayats, their chief value lies in building up village consciousness, and making the village-people think for themselves, and stimulating greater interest in matters of common well-being.

It is easy to exaggerate the effects of illiteracy, for though illiterate the Indian Khedut is in the sense that he does not know the three " R's," he has in the opinion of competent observers more practical common sense than the average English farmers, although the latter may read his daily paper and scripture on Sunday. As remarked by a newspaper correspondent, an average farmer in India may be a fatalist in most things even to an unhealthy extent, but he has generally common sense and patience and habits of industry and thrift of a rare degree. But there is no denying that he is lacking in education, and when this hiatus is filled, he should without doubt prove an enviable specimen of agriculturist, equal to his compeer in any part of the world.

Liquidation of rural illiteracy.

The price the Khedut has to pay for illiteracy and ignorance is very heavy, as will be seen by the higher rates of interest which a backward class like the Kolis are subjected to, compared with the easier rates which Kanbis in the same village ordinarily pay.

In this connection the following remarks occurring in the Committee's Report will be read with interest:—

> " Though the scale, on which Kanbis incur debts is much larger than in the case with Kolis, the former enjoying much higher credit and his wants also being comparatively greater, yet the Kolis as a class are subjected to a much higher levy by way of interest, premium, etc., for their borrowings. This is seen by contrasting the varying rates of interest prevailng in Kanbi and Koli villages, and the different rates charged in the same village by the same Sowcars to the Kanbi and Koli Kheduts respectively. For instance, in Ghanghli, good Kanbi Kheduts can obtain their monetary and other supplies on credit by paying 6 to 12 per cent interest only, while a Koli Khedut has invariably to pay Savaya premium; and further occasionally the Savaya Khata is subject to renewal, every Khalsa season, on failure of payment. In other words, the bond may be renewed twice or thrice in the year, 25 per cent premium being added each time. This practice of what is popularly known as Mol-Savaya prevails in Bhangadh, in which all the Kheduts are Kolis. Where the loan is not subject to Mol-Savaya increase,

the Koli Khedut in Ghanghli has to pay interest at the rate of half an anna per rupee per month, which works out at a rate of $37\frac{1}{2}$ per cent per annum. Again in Sedarda, the Kanbis generally pay 9 to 12 per cent interest only, while the Koli borrower pays $18\frac{1}{2}$ per cent interest, even when the loan is secured by a pledge of ornaments."

The conclusion is inevitable that the greater the illiteracy of the Khedut, the more complete is his dependence upon the Sowcars, resulting in proportionately greater exploitation, and where the intensity and extent of indebtedness is thus directly treaceable to ignorance and backwardness, one effective way of checking indebtedness in future would no doubt be through popular enlightenment by means of education.

As Sir Prabhashanker Pattani said in the course of a speech addressed to the Kheduts assembled on the occasion of opening the Patel House in Bhavnagar, when the announcement of remission of revenue arrears was officially made:—

> " Please do not think your goal has been reached now that you have got the money and are free from Darbar Debt. All this is fruitless without the right kind of education and an uneducated and short-sighted prodigal will easily squander away his father's fortune even though it may amount to rupees one lac."

If the Indian Khedut is proverbially improvident and short-sighted, the same is in no small measure due to his utter ignorance and illiteracy, which prevent even a dim realization on his part of the accumulating load of interest and other charges, to which he makes himself liable in respect of an initial small debt not paid off in time, not because of incapacity but simply owing to carelessness and ignorance. The Committee came across numerous instances of originally small debts allowed to be accumulated to huge proportions, simply owing to the Khedut's initial blunder or carelessness in not liquidating his liability, when he could have done so easily. The Committee in this connection has very properly remarked in the course of the Evidence Notes, that instances of this kind indicate the necessity of properly educating up the Khedut to the great risks, he runs in postponing payment of small outstandings, and even of using some moral compulsion to induce him to repay in time. Both these factors will be present in a way, when the lending agency is either the State or a co-operative society.

But, of course, unless and until the Khedut has learnt the three "R's," he can never realize the great risks he runs, in postponing repayment of a loan, which he easily can. It is indeed sad to think that even in villages having a school, boys of the Khedut class are not seen to take full advantage of the available facilities for education. But it is encouraging to know that where a village goes in for Gramya-Panchayat, generally the first reform it asks for is the establishment of a village school in its midst.

As a rule, new schools are opened in villages having a population of 500 and more, but an exception has been made in favour of a Gramya-Panchayat village, where a school is established, even though the population be less than 500. This will in a way quicken the pace, at which illiteracy is being liquidated—illiteracy which is considered the Sowcar's strongest ally in his exploitation of the ignorant and improvident Khedut.

Further, it is satisfactory to note that the Gramya-Panchayat villages are seen, compared to the non-Panchayat villages, to be more prompt and regular in the collection of Land Revenue, for which they are responsible without the intervention of a Thandar. This only shows that the trust reposed in these villages has on the whole been well repaid.

Dealing with the prime originating causes of indebtedness, one frequent and fertile source of debt is the unduly high scale of social expenditure referred to above.

Intelligent Khedut castes keen on regulating scale of social expenditure.

In this connection, it is satisfactory to note that the Kheduts here are getting alive to the necessity of regulating the scale of their social expenditure, if necessary, even through State intervention. It would be worthwhile quoting here *in extenso*, the remarks on the subject, occurring at page 42 of the *Report of the Original Committee*:—

> "There are many sensible members in such communities (*e.g.*, Kanbis, Pancholis, etc.), who are keenly alive to the tyranny of caste customs and social conventions, which compel them to indulge in extravagant expenditure and even to incur heavy debts for doing so. To escape from such tyranny they have attempted to regulate the conduct of the caste-members, by making rules and bye-laws. But lacking the necessary sanction, the rules and regulations are obeyed more in the breach than in observance; and one is not sure but the caste people would

welcome, in such matters, even State legislation; and where a definite opinion to that effect is found to exist in the caste, the State should not hesitate to undertake and enforce suitable legislation under proper safeguards."

There is an important Khedut caste here called the KHARAKS. They are hardy and industrious and they supplement their income, by each maintaining a large number of buffaloes. But in spite of their industry and good earnings, they were being ruined by their extravagant scale of expenditure on ceremonial occasions, like marriage, Ghargharna (remarriage), Ana (ceremony of sending the married daughter for the first time to her husband's), etc., etc.

Kharaks demand and obtain legislative sanction for enforcement of caste-rules.

To escape the tyranny of this conventional expenditure, the Kharaks voluntarily applied for and have obtained legislative sanction to their caste-rules, providing a prescribed scale of expenditure for the different social occasions. A breach of the rules will entail a fine, which the Mahal Vahivatdar (District Revenue Officer) concerned will help to recover, as Darbar dues, from the guilty party and hand over to the caste-Punch. This sanction provided by the State, has prevented extravagance among the Kharaks, which had grown in recent years to a most alarming extent.

Of course, imposing social reforms from outside, is seldom advisable and practical; but again to quote the words of the Committee's Report: "The framing and publication of these rules and regulations, in a way, indicate the need and also the preparedness of the caste concerned to undertake social reform by means of State aid and intervention; and it is up to the State to provide the necessary legislative sanction, in the absence of which, these caste-rules have so far remained a dead letter and have no more significance than the expression of a pious wish."

The example of Kharaks shows that action on the part of the State to enforce caste-rules is not always unwelcome and, at times, such State action seems to be the only way of saving from themselves intelligent and hardy castes of Kheduts such as Kanbis, Palewals, Pancholis, Kumbhars, to name only a few. For they unaided and by themselves, in spite of paper caste-rules, are unable to resist the tyranny of the prevailing caste customs and conventions.

There has been no intention to oust the village Sowcar nor would it be possible to do so. At the same time, in order that the Khedut may not be unduly exploited when he has occasion to borrow for his *bona fide* agricultural needs, Tagavi advances are granted by the State on a very large and liberal scale either without charging any interest at all, or in the case of advances of very large amounts loaned for costly agricultural improvements, charging very moderate rates of interest. Usually more than a lac of rupees are advanced for seed-Tagavi alone, during the sowing season annually, for which no interest is charged. Further a grant of rupees fifty thousand is provided to be advanced to the needy Kheduts, for the purpose of deepening old wells and digging new ones, and for purchase of bullocks and sugarcane seed. Besides making Tagavi advances in normal seasons, as described above, special amounts are sanctioned to help the Kheduts in tiding over a particularly difficult period of distress. For instance, some two years back, about seventy villages in the two Mahals of Kundla and Lilia paying an annual assessment of rupees six lacs and more were subjected to the effects of a most severe drought. The State first suspended the whole of the revenue demand, and later remitted nearly 75 per cent of the suspended revenue. Further, the Darbar sanctioned a special amount of rupees one lac five thousand for different kinds of Tagavi, such as seeds, food-grain, purchase of Mohttas, grass, etc. The whole of this amount was remitted, provision for the same having been made from the accumulated interest of the Cultivators' Amelioration Fund, established by the far-sighted wisdom of His Highness the late Maharaja Saheb, to celebrate the birth, in 1912, as heir-apparent, of the present Maharaja Saheb His Highness Krishnakumarsinhji, after whom the said Fund is named.

Tagavi advanced on liberal scale to meet *bona fide* agricultural needs.

The burden of old debts was the chief stumbling-block to the progress of the co-operative movement. But the ground having been cleared by wholesale liquidation, attempts are now made to push on and multiply Agricultural Credit Societies. These societies and the liberal Tagavi advances referred to above, between them, it is hoped, will go a long way to meet the *bona fide* agricultural needs of the Khedut. The State advances to each of the societies, an amount equal to the amount collected by it, but not exceeding rupees two thousand at 3½ per cent, and further makes a free donation of 20 per cent of the deposits collected by the members, not exceeding in any

Removal of old debts paves the way for healthy development of co-operative movement.

case rupees four hundred. Altogether the State loan advanced to these societies amounts to Rs. 1,05,750 and the donations total Rs. 20,389. The loan is being recovered in fixed easy instalments. It bespeaks the solvent condition of the societies, that hitherto there has been no default in payment of the State instalment dues.

Complete absence of intermediary landlords: *bona fide* cultivators alone competent to hold land.

In British India and elsewhere, the agrarian problem is further complicated by the fact of there being an intermediary superior land-holder and occasionally several grades of them—between the Government and the actual tiller of the soil. This luckily is absent in Bhavnagar, where the tenure of the holding is subjected to the condition of the holder carrying on agriculture on his own. He has no free right of sub-letting except with the previous sanction of the District Revenue Officer under prescribed conditions and for a limited period only.

New right of sale and inheritance granted.

The occasion of the investiture of His Highness the Maharaja Saheb with full powers six years ago, was made memorable by conferring on the Darbari Kheduts, the right of sale and the recognition of all legal heirs and successors in respect of their holdings. The new rights conferred will have, it need hardly be said, the effect of liquefying and making available for the Khedut's immediate use, what were up-till now merely frozen assets; for the Khatedar has had ere now no transferable interest in his holding, which was further liable to escheat to the Darbar, when there was a failure of male heirs in the direct line.

Of course, it would be next to impossible to exactly assess the amount, by which the value of the Kheduts' assets have been increased, but the total Darbari land under Khalsa Vahivat amounts to about 18,00,000 Bighas, and at a moderate calculation, taking the average price of a Bigha to be Rs. 10, the new right of sale, it may be legitimately claimed, has added to the value of the Kheduts' assets and increased their credit by anything from 1½ to 2 crores.

New right restricted to transfer *inter se* to prevent land passing into non-agriculturists' hands.

The new rights of sale and inheritance will, it is expected, greatly intensify and strengthen the Khatedar's natural attachment to the soil, and his increased credit will enable him to carry out of, on his own, any costly permanent scheme of agricultural improvement, which he may desire to undertake.

At the same time, it is to be hoped that this large, sudden and unexpected accession to the value of the Khedut's assets and his credit will not demoralize him by instigating an inherent tendency to incur debts recklessly. Some check against such an untoward result of a well-intentioned boon is provided by restricting the right of transfer of holdings, only among those who are themselves *bona fide* cultivators. This seeming restriction of the right to freely deal with their holdings is, it hardly needs saying, very necessary in the Khedut's own interest. In other places, where the ryot enjoys an unfettered and unrestricted right of sale, it has resulted in the land passing, in an ever-increasing measure, out of the hands of the cultivating classes into the hands of capitalists and absentee landlords, who are merely interested in rack-renting. This has led to a steady deterioration of the soil and to reduction of the cultivators to the position of mere tenants-at-will or landless labourers.

Prohibitory order against undue fragmentation.

The evil result of undue fragmentation of holdings has been attracting attention everywhere, and though the tendency in this direction is not still marked in the Bhavnagar State, it is not altogether absent, as will be seen from the following remarks made in the course of the Committee's Report as regards the village Bhadrod under Mahuva:—"Bhadrod is a big village, and one or two points, which came under observation in connection with it, may be noticed here, as being typical and also as having more or less direct bearing on the economic condition of the cultivator. The majority of the Bhadrod Kheduts are Pancholis, a hardy and intelligent class of cultivators, next if at all to the Kanbis only. Their original Khata-holdings were fairly large and economic. But with their progressive subdivision among the heirs and successors of the original holders, the tendency towards fragmentation and uneconomic holdings is on the increase; and the numerous and growing Khedut population has so increased the pressure on land that several hard cases were noticed, in which good *bona fide* cultivators, simply because their holdings were too small to fully occupy them, were driven to eke out their slender agricultural income, by plying carts on hire, farming the fruit-crops of mango and Gunda trees belonging to others and even by manual labour.

It is hoped that the evil of the sub-division of holdings tending to make them uneconomic will be more or less effectively stopped by the recent orders, which prohibit both undue fragmentation and also transfer by sale or otherwise of a part of a

holding, where the area of such holding is less than a prescribed number of *bighas*.

Greater elasticity introduced in Land Revenue collection.

The rigidity in making revenue recoveries has been criticised, and, no doubt, it is at times responsible for Khatedars incurring debts. Efforts have been made to relax this rigidity in two ways in recent years: one is that the general anna levy for arrears is fixed for the whole village having regard not to the condition of the well-to-do Kheduts, but that of the middle and poorer class of Kheduts also. In other words, this levy would be moderate enough to be easily payable by almost all the Kheduts of the village. But it may be taken that there will be other Khatedars, who are able to pay over and above the general anna levy fixed as above. In their case, the local Vahivatdar will fix a sum to be paid by the individual holder towards the balance of his outstandings. This individual levy, as it is to be determined by the local Vahivatdar, may subsequently be raised or reduced by him, to suit modified conditions, should they come to pass.

Another measure of elasticity adopted is that *kist* dates are not always rigidly adhered to, and almost every year special authority is given to the Divisional Assistant Revenue Commissioners, to extend the period for the payment of instalments so as to suit the varying requirements according to the different seasonal conditions of Mahals, Tappas or even villages, as the case may be.

Grass stored and stacked in depôts to meet emergency.

With the tendency to grow money crops excessively such as cotton, groundnut, etc., the Kheduts generally are unable to store sufficient fodder for maintaining their cattle, and a delayed monsoon or an unduly prolonged break during the rainy season finds the Khedut much short of his fodder-stock. The State, with a view to help the Khedut, when he has thus run short of his stocks of grass and Kadbi, stores in suitable centres between 3 to 4 crore lbs. of grass. Only last year, when the rains held off for more than a month and a half between July and August, the Darbari Stores were, at short notice, able to supply about 50,00,000 lbs. of grass to the cultivators on credit. Without such timely assistance, the Kheduts owning large herds of cattle would have been completely stranded and would have had to run into debt to purchase the needed stock of fodder for maintaining their cattle.

Cattle Improvement.

So far mostly legislative or administrative measures, which at best can render only negative outside help, have been mentioned. Coming to more positive steps taken to improve the economic position of the Kheduts, cattle improvement takes the foremost place, both in view of its importance and the quick results, which can be obtained by only a slight effort intelligently directed. No doubt, the recent Viceregal appeal has given a great fillip to the campaign for cattle improvement. But this vitally important matter has engaged the attention of the Bhavnagar Darbar for the last five years and more. The chief obstacle in bringing about the desired improvement was the age-long semi-religious prejudice against castration. But this prejudice was now out-of-date and altogether unjustified, in view of the almost painless and innocuous method of castration provided by what is known as the Birdizzo method, and it is satisfactory to note that a little persuasion followed by actual ocular demonstration of the operation by the Birdizzo method, succeeds in overcoming the prejudice, and most Kheduts now willingly allow their young male calves to be castrated. For this, a special staff of Birdizzo operators is employed, who have so far carried out 8,624 castrations.

Particular care is taken to remove the roaming so-called Mahajan bulls, which are not a little responsible for the deterioration of the famous indigenous Gir breed, which is both a good draught and milch-animal. Along with the elimination of the useless scrub bulls, arrangements are made for supplying to the villages, good reliable pedigree bulls for breeding purposes. The number of bulls maintained for service now stands at 84. The difficulty at present experienced in obtaining really good reliable bulls of indigenous breed can be met by establishing local breeding farms, which would ensure a continual supply of such reliable breeding sires. Proposals for establishing two such breeding farms have been submitted and are under the consideration of the Darbar.

Apart from any extravagant expenditure, the Khedut may indulge in on social occasions of marriage etc., the costliest item in his agricultural budget is that relating to the purchase of bullocks. According to the last quinquennial Cattle Census, the Bhavnagar agriculturists own in all 82,426 bullocks. Taking the average working life of a bullock to be ten years, in order to keep up the working strength of these 82,426 bullocks, it would be necessary to replace 8,242 worn-out bullocks with fresh ones every year. Even if we calculate the average price

of a bullock to be Rs. 50, a sum of Rs. 4,12,300, that is, more than 4 lacs are, it may be taken, being annually spent by the Bhavnagar farmers for buying their agricultural live-stock. All this amount could be saved, if the Kheduts take to raising their own stock of required bullocks, by each of them maintaining a cow or two, which they can easily and cheaply do. The cultivator, then, will not have to grovel before the moneylender for a loan of money nor depend upon the Sindhi bullock-trader for his agricultural power-unit. Further, the stock, which the Khedut will rear at homes, will be much superior to what money can buy for him. In the villages, where the breeding sires have been maintained for a couple of years, there has been both a noticeable improvement in the new progeny and also a marked decline in the number of Kabalas (agreements entered into with Sindhis for the purchase of bullocks).

Cultivators' Amelioration Fund utilized in providing Pacca built wells for raising irrigated crops.

Allusion has been made before to the Cultivators' Amelioration Fund, and the grant from its accumulated interest of free liberal help on occasions of drought and famine. But apart from such occasional and very necessary use of the Fund to meet the emergencies of flood and drought, the Darbar were considering the feasibility of applying the accrued interest in a way, that, while permanently benefiting the Khedut, would also better enable him to resist the recurring exigencies of complete drought or partial failure of monsoon. And after much anxious thought and deliberation, the Darbar came to the conclusion that in the peculiar circumstances of the Indian climate and especially with such scanty and precarious rainy seasons as we are experiencing in Kathiawar, the best insurance for an agriculturist against a treacherous monsoon would be to have permanently made available for him the means of well irrigation. This was the more so, in the Bhavnagar State where there are no large irrigation works nor is there much possibility of such works being undertaken in future.

Rs. 79,506 spent in one year in Pacca construction of 218 wells.

Many old wells having good underground supply of water had fallen out of use, simply because they were *kachcha* and the falling earth from the sides had either made their use impossible or very difficult and dangerous without great initial and annually recurring and increasing outlay of labour and money, which would be prohibitive in many cases. Accordingly, it was decided to first turn attention to these old wells having reliable

underground water-supply; and Rs. 75,000 were sanctioned last year fir building *pacca* the old dilapidated wells of the above description in the Dhassa Tappa of Umrala Mahal. Besides such a concentrated programme of construction of old wells in one sub-district, Rs. 20,000 more were sanctioned for the building of such wells in scattered parts of the State. Out of this amount sanctioned as above, Rs. 62,161 were spent in Dhassa Tappa, for the *pacca* construction and renovation of 162 wells and Rs. 17,345 were spent in the construction and renovation of 51 wells in different parts of the State.

Rs. 80,000 sanctioned in 1937 for renovation of wells in Gadhda Mahal.

Further for this year, Rs. 80,000 have been sanctioned from this Fund for the *pacca* construction of old wells in another Mahal of the State, *viz.*, Gadhda Mahal.

The whole of the amount required is first provided by the State from the interest of the Fund mentioned above. Half of the amount is debited to the account of the cultivator concerned and is to be later recovered from him in easy instalments and the remaining half is written off as a gift from the State.

Superior value of hand-ginned cotton-seed compared to machine-ginned cotton-seed for sowing purposes.

Efforts have been made for some years to encourage hand-spinning and hand-weaving as a subsidiary industry by means of a special expert staff. Hand-ginning is also being popularised because cotton-seed from the hand-ginned Kapas has a much higher seed value than the machine-ginned cotton-seed. Besides a much smaller quantity is required for sowing, where the hand-ginned cotton seed is used, which means a considerable saving in the large outlay usually required for the purchase of seed.

One would think that from practical experience no one would more greatly understand and appreciate the need of good and pure seed than the Khedut; but the careless way, in which many Kheduts set about to obtain seed at the eleventh hour when the sowing season is overdue, makes one almost doubt whether the Khedut after all understands the value of good and pure seed. Perhaps this apathy of the Khedut is partly explained by economic poverty. But no effort should be considered too great to ensure the continuous supply of the right kind of seed, and as a practical means to achieve this object, hand-ginning is invaluable. It is not suggested that the Khedut should hand-gin the whole of his cotton produce, but he should be encouraged to retain a sufficient quantity of picked cotton from his own field,

that would suffice to yield the required quantity of pure seed and also supply the clothing needs of his family.

Defective and deficient manuring.

If the yield of agricultural land is not so great as one might wish, it is in no small measure due to the deficient and defective manuring of the soil. One effective way to raise agricultural produce is obviously better manuring of the soil. As an instance in point, may be cited the following example, that casually came to the Committee's notice in village Mandal of Victor Mahal. One Khoda Bhara, the Patel of the village, was able to raise one Kalsi of wheat for every two Bighas of Jarayat land, while in the case of other cultivators of Mandal, six to ten Bighas were required to yield the same quantity. This marked difference in the crop yield in regard to soil of the same nature was accounted for by the better manuring of his land by the Patel, who was able to purchase and cart manure from distant villages, while the poorer cultivators could not afford the necessary outlay.

Kheduts encouraged to grow more trees to provide alternative fuel and thus save all the cowdung for manure.

But so long as cultivators are addicted to the habit of using cowdung as fuel, there will never be enough manure to go round and supply the needs of all Kheduts. All Kheduts cannot afford the expensive chemical manures; nor are they one-quarter as efficacious, it has been proved beyond doubt, as farmyard manure. The effect of chemical manures is exhausted in a year or two, while the soil fertilized with farmyard manure continues to give better crop-yield over a number of years—ten years and more. One way to make larger quantities of farmyard manure available is to wean the cultivator from the age-long habit of using up cowdung as fuel and burn wood instead. At present only the excreta of the cattle stock during the four months of the rainy season, when owing to the wet weather, dung-cakes cannot be dried for lack of sufficient sunshine, is available for purposes of manure, and practically the whole of the animal excreta of the remaining eight months is consumed as fuel. But before cultivators will readily take to wood for fuel purposes, it is necessary to arrange for an ample and cheap supply of that commodity.

Afforestation of waste land.

One of the ways to make such a supply available is to encourage the cultivator in every possible way to utilize the waste or salt part of his holdings, which it would be profitless to cultivate and the boundaries of his field for the purpose of growing babul and other trees thereon. Another measure

indicated is the afforestation of suitable areas (*i.e.*, growing and maintenance of small ' Kants ') in the neighbourhood of villages, which, besides providing additional grazing facilities, would also help to increase the available supply of cheap fire-wood. With a view to find out such suitable areas, even a special *ad hoc* survey might be ordered. Babul trees would also supply the necessary wood for agricultural implements, which, it is becoming increasingly difficult to obtain in these days.

The afforestation of suitable areas, apart from increasing grazing facilities and cheapening the supply of fire-wood, might to a certain extent tend to increase the average rainfall, if denuding the land of trees and increasing encroachment on forest areas are responsible, as it is held by many, for the diminishing and precarious rainfall of recent years.

The recent order exempting trees standing on Khata land from Chauth levy, and conferring full rights of ownership in regard to trees standing on Khata land, will, it is hoped, encourage the growth of more trees by cultivators. Efforts are also made to stimulate the planting of new trees every year by persuasion and suitable propaganda through the Revenue Department.

Use as manure of meat and bones of dead animals advocated with the double object of making up deficiency in manure and weaning the untouchable classes from their insanitary habit of carrion-eating.

Incidentally, the use by the Kheduts of carrion as manure, will, while partially meeting deficiency of that article, also assist the efforts made to wean the untouchable classes from their age-long habit of carrion eating. Untouchability cannot be rationally justified, but if the popular feeling is analysed, it will be seen that the prejudice against the untouchable classes is mainly traceable to their singular habit of carrion eating, which is nowhere else to be met with even among the meat-eating people. So it naturally follows that the strength of the popular prejudice will be greatly reduced, if the untouchables are somehow made to give up this habit of theirs. But old habit dies hard, and further unfortunately their hereditary Chamars' profession, *i.e.*, that of the skinning of the carcasses of dead animals, which these classes ordinarily pursue, makes carrion so easily available to them, and that without cost, that the members of their class find it naturally hard to resist the temptation of eating carrion, to which they have been addicted for generations past. But if our Kheduts learn to use the meat of dead animals as soil fertilizers, they will not only thereby be able to make good the deficiency of farmyard manure, but also in no small

measure reinforce the efforts at self-improvement of the untouchable classes. For the Kheduts' use of carrion as manure will make it a marketable commodity, and when carrion is seen to fetch a price, it will automatically counteract the temptation to use it as food. So with a view to simultaneously reform the untouchables of their old habit of carrion eating and to make the same available, as manure for the cultivators, the Darbar auctions the Bham Ijaras (monopoly of skinning the carcasses of dead animals) of Kasba towns, with the condition attached of not using carrion as food, even though such a course involves sacrifice of revenue. In some places, Kheduts have been found willing to make use of carrion for manure.

Just like carrion, bones are also very valuable manure, but they first need to be converted into bone-meal. The cost of carrying the bones to a factory and then fetching the bone powder or meal back to the village would be almost prohibitive. But if the bones are just scorched without being burnt to charcoal (which latter would destroy its most valuable parts), the bones would become very friable and then could be easily crushed and powdered so as to make them immediately fit for use as manure. In some villages, Kheduts have begun to collect bones and use them for manure in the way above-described.

Better conservancy arrangements will improve situation and add to the available quantity of manure.

Conservancy arrangements are never satisfactory in our villages. People ease themselves in public places in a most insanitary manner. If they can be induced to collect the night soil for manure, it would kill two birds with one stone, as it will make more manure available and also improve the village sanitation. Efforts are made to improve sanitary arrangements in villages on these lines.

Propagation of better and more profitable methods of cultivation.

It would be too long to detail here several agricultural improvements, which Kheduts are being induced to adopt by means of suitable propaganda and demonstration plots arranged by the Agricultural Department. A passing reference, however, may be made to (1) the bunding of fields to conserve moisture; (2) better and more scientific collection and preparation of manure; (3) insistence on winter tillage and (4) the observance of proper spacing in the sowing of crops so as to allow the plants to obtain the maximum nourishment from the soil and ample space for the fullest growth and development. These are simple reforms easy to carry out but very promising in their results.

Especially the last mentioned reform—the spacing of crops, if generally adopted, will not only mean a larger crop-yield but also a considerable economy of manure and labour. For, it will then be unnecessary to sprinkle and broad-cast the manure in the fields as has to be done at present so as to reach the too closely sown crops. This results in a considerable wastage of an article, whose supply is very limited. But if the furrows are properly spaced and separated from each other by three to five feet, then only the furrow trenches would need to be manured. This will not only economise manure but also ensure the maximum benefit being derived as the manure having been put in the furrows, will better tend to preserve its active essential elements, which either are destroyed or greatly lose their efficacy owing to being exposed to sun and wind, when the manure is only scattered and thrown about as is being done at present by most Kheduts. Further the widely separated furrows will draw to themselves the run-off of the monsoon water from the unploughed intervening spaces, helping greater retention of moisture in the parts of the fields actually sown and thus enabling the raising of the crops with a smaller amount of rainfall. Lastly, the intervening unploughed spaces being left fallow will be rested and renewed and be better fitted for cultivation next year. This matter has been detailed at some length even to the point of weariness, for the reform advocated is simple and can be carried out at a small cost or rather at an actual saving of cost and labour.

Similarly, the ploughing and preparation of fields during the winter immediately after the Kharif crops are harvested about Dewali, would enable full absorption of cold and heat by the turned-up soil; and this would even partially compensate for deficient manuring and give, it is claimed, anything from 50 to 100 per cent richer crop-yield.

Unsafe to copy wholesale foreign methods without considering their suitability to local conditions.

Before concluding, it would be worthwhile drawing attention to the prevalent obsession to adopt wholesale foreign methods without properly considering their suitability to local conditions. Of course, no one deprecates scientific research or the study of successful foreign models; but at the same time, if one's mind is too much preoccupied with what one may have seen outside, one is apt to think only in terms of such experience and advocate its adoption indiscriminately, even though the same may not be applicable in the Indian conditions. The way tractor-ploughing is widely recommended furnishes an instance in point. But only

a couple of months ago, the then Revenue Member of the Punjab was obliged to confess to the Government Expert from Delhi that tractor-ploughing was unsuitable in the agricultural conditions obtaining in the Province. But it would be interesting to know how long it took to find out this obvious truth and how many costly tractors were purchased and attempted to be put into use before their unsuitability was discovered and established beyond doubt.

The correct mental approach to the local problem should, it is submitted, be free of any bias or predilections of any kind, and if the mind thus freed, is brought to bear on a conscientous study and observation of the local conditions, the natural remedy best suited will be automatically suggested. But all this is only by the way.

This note is so to say a retrospect and stock-taking of the situation as it stands today after the redemption of agricultural debt was carried out in Bhavnagar. Incidentally, the opportunity has been taken to survey the agricultural problem as a whole; for, as stated at the out-set, mere redemption, though an essential preliminary step, is by itself not enough. In a way, it barely touches the fringe of the complex problem, whose proper solution demands simultaneous action on a wide extensive front. At the same time, the complexity of the problem and the admitted need of other supplementary measures should not make one shy at undertaking redemption, which is a *sine qua non* of all other reforms to follow—reforms which would have no chance whatsoever, while the cultivator was weighed down by the crushing burden of past debts. But once this dead-weight is lifted, it would recreate the cultivator's interest and enthusiasm now all but lost, and release new stores of energy, which could be harnessed for carrying out other desirable and necessary measures of reform and reconstruction.

In surveying the agricultural problem, it has been necessary to deal with even seemingly small matters which, though directly concerned with the economic amelioration of the Indian cultivator are apt to be overlooked just because they are small and minor. At the same time care is taken to concentrate attention on such simple broad reforms in agriculture and rural life as could be easily carried out without outside help and at only a little extra cost and labour, if any.

Naturally, the conditions obtaining here have been principally before the writer's mind, but one may take it that the rural and agricultural conditions, allowing for local variations, would be much the same all over the country, and

what is stated herein will *mutatis mutandis* apply equally elsewhere.

It is man's to try: it rests with God to give success.

Most of the measures of reform indicated above have been either adopted or are in course of adoption in the State to conserve and consolidate the good work done by the preceding redemption. All the same, the future which always lies on the knees of the Gods must to a certain extent remain uncertain. But if only man honestly puts forth the best efforts, he is capable of, the same, it is hoped, will receive God's blessings and fructify. Bhavnagar's motto is मनुष्य यत्न ईश्वर कृपा (It is man's to try: it rests with God to grant success).

AGRICULTURAL WATER-SUPPLY AND DENSITY OF POPULATION IN THE GANGES DELTA

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In agricultural economy the two obviously uncontrollable factors of natural environment are soil and rainfall. There is no sharp line of distinction between the physical and chemical conditions of the soil and the meteorological conditions in spite of the fact that the distinction is clearly marked. In fact these two sets of conditions constitute what we understand by environment. But, on the whole, in a monsoon region like the Gangetic Plain, the differences in the nature and distribution of soils in the different Natural Regions are far less important than the differences in the amount and distribution of rainfall. In fact the Natural Regions of the Gangetic Plain are essentially Rainfall Tracts in which the distribution of crops is determined essentially by the amount and distribution of rainfall. In the Gangetic Delta agricultural water-supply has a unique importance. The entire balance of agricultural economy depends not only upon heavy rainfall, but also upon the deltaic river-system which is an important source of irrigation. But we must also remember that the Delta-building rivers also work out their destiny on the plastic mud, and it is their life and movement that determine the nature of the deltaic soil. Thus where the deltaic rivers and their distributaries are still active they not only supply moisture to the soil but also build new land and renew the productive powers of the old soil by depositing rich layers of silt. On the other hand, where the deltaic rivers are inactive land becomes high and dry, loses its high fertility and, at the same time, cannot derive moisture from the seasonal floods, or, if it has not already been raised above the flood level, it suffers from water-logging and over-saturation. Hence the only factors of the natural environment which really count in the Gangetic Delta are rainfall and river floods, the two important sources of agricultural water-supply. Before we estimate the relative importance of these two factors it is necessary to study the variations in the amount and distribution of rainfall in relation

to variations in the density of population in the moribund and the active Delta.

Average Rainfall in Inches (Normal)

Regions.			Moribund Delta.	Active Delta.
March to May	...	...	9·63	17·92
June to August	...	...	34·71	49·44
September & October ...		...	12·97	17·56
November to February		..	2·44	3·02
Rainfall in critical months		...	22·60	35·48
Total rainfall	...	...	59·75	87·94
Mean density	...	...	592	1084

In the above table we find a striking correspondence between the density of population and the total amount of annual rainfall. But the significance of this tendency becomes clear when we study the relative distribution of rainfall over the entire agricultural season, and its effects upon crops. In a monsoon region the timing of agricultural operations, and the succession of crops depending upon it, are such that it is the seasonable distribution of rainfall rather than its total amount which is of primary importance. The main crops in a monsoon region like the Gangetic Delta are wet crops included in the *Bhadoi* or the *Aghani* harvest. A comparatively small area is under dry crops of the *Rabi* harvest, because either the heavy annual precipitation prevents the cultivators from sowing a large area under these crops or they are regarded as cheap catch-crops which they do not think worth while raising if they have already obtained a good outturn in the *Bhadoi* and the *Aghani* harvests. Now the success of both the *Bhadoi* and the *Aghani* crops, either as alternative crops on different lands or as successive crops on twice-cropped lands, depends entirely on sufficient and well-distributed rainfall. For the *Bhadoi* crops showers in March and the ante monsoon showers in April are absolutely necessary for the preparation of the land. From April onwards rainfall is required at frequent intervals, but it should not be heavy or continuous. *Bhadoi* rice is generally sown in May or earlier, and consequently heavy rainfall at this time and in the following months is injurious to the sowing and successful germination of this crop. Scattered showers with intervals of sunshine are, on the other hand, very beneficial. But the total amount of rainfall

in March, April and May is also an important factor of agricultural productivity. If the season opens with good rainfall the natural conditions become favourable for preparatory tillage and early sowings, and if the *Bhadoi* crop thus gets a good start it can be harvested early with the help of sufficient monsoon rainfall, so that the same land is fit to receive the transplanted seedlings of *Aman* paddy. Now it appears from the comparative table given above that, while the rainfall in March, April and May is 9·63 inches in the moribund delta, it is 17·92 inches in the Active Delta. It is obvious that from the point of view of agricultural productivity natural conditions are far less favourable in the former than in the latter region. The only crop in the *Aghani* harvest is winter rice whose fate depends upon sufficient and well-distributed rainfall. For winter rice the most favourable rainfall is the premonitory shower in May or early in June. The rainfall in the latter half of June and July should be heavy, otherwise transplantation will be hampered, and there should be an interval of comparatively fine weather so as to permit of weeding operations being successfully carried on. Rainfall in September should also be heavy and it must shade off into fine weather with showers in October. The most important factor in the growth of transplanted paddy is rainfall in October, on which the outturn of this crop entirely depends. Now so far as the cultivation of winter rice is concerned natural conditions are also much more favourable in the Active than in the Moribund Delta. The total amount of rainfall in the monsoon season as well as in September and October is much greater in the former than in the latter region. Moreover the rise of the rivers in the Active Delta during the monsoon months makes it almost independent of the vagaries of weather, while agriculture in the moribund delta depends entirely on the amount and distribution of rainfall. As regards winter rainfall, on which the growth and maturity of *Rabi* crops essentially depends, the cultivators in the Active Delta also enjoy a slight advantage. But, the *Rabi* crops have an economic importance only in the dry tracts of the moribund deltas where unfavourable natural conditions prevent the cultivators from raising heavy-yielding crops of the *Bhadoi* and the *Aghani* harvests.

The brief survey of the relation of crops to meteorological conditions shows very clearly the danger to which the agricultural economy in the Gangetic Delta is exposed in abnormal years. Normally the total amount of rainfall in a monsoon region is so ample that, given a normal distribution, three harvests can be taken off the land in the course of the year. But although high

rainfall is thus a cause of high agricultural productivity, yet agricultural operations being so nicely adjusted to meteorological conditions, there is great agricultural insecurity whenever there is insufficient or ill-distributed rainfall. It is therefore important for us to study in greater detail the sources of agricultural water-supply in the Moribund and the Active Deltas, particularly from the point of view of agricultural security in years of drought or ill-distributed rainfall.

In West Bengal the configuration of land varies distinctly from east to west. The eastern portion of this region constitutes a comparatively recent deltaic formation, a flat alluvial plain raised only a few feet above the sea level, while the western portion is an undulating laterite formation. The alluvial portion is more densely populated than the laterite portion. We also find the same contrast when we consider the nature and sources of agricultural water-supply. In the alluvial tract the main difficulty of agriculture is not lack of water-supply but an excess of it due to inundation of land during the rainy season. The land which is only a few feet above the sea level is badly drained, and such drainage as there is is very much obstructed by dams or weirs constructed across the rivers and drainage channels for the purpose of irrigating land which has too slight a slope. Sometimes embankments have to be built around fields for the purpose of retaining water on them. For example, in the eastern alluvial tract of Midnapur "There are slight differences of level sufficient to determine the flow of the rivers and to make it necessary for the cultivators to build small embankments known as *Ails* round individual fields to retain the water on them. As the south-east is reached even the slight differences of level practically disappear and instead of *Ails* round individual fields there are slightly larger embankments round entire villages of five or six square miles in area within which there is not a difference of a couple of inches between one field and another and they have simply to keep the water from flowing into the artificial depressions of the drainage channels."[1]

The result of such interference with natural drainage has been disastrous. An excess of rainfall is sufficient to flood the smaller rivers whose channels are too small and have too slight a slope to carry off much water owing to the slight slope of the

[1] *Survey and Settlement Report, Midnapur.* It must be noted that this system of private irrigation is liable to abuse. For example, in years of heavy rainfall the cultivators very often cut the *Ails* to let the water out into their neighbours' fields in order to utilise a golden opportunity of catching fish.

country, and flood water bursts through the artificial barriers erected for purposes of irrigation. Moreover the embankments running along the larger rivers have increased the violence and frequency of floods whenever there are sudden freshets. For example, in Burdwan the tracts lying to the south of the Damodar are liable to floods as a result of obstructed drainage. In Midnapur the construction of a network of circuit and cross-dams has obstructed the drainage of the country by restricting the action of the tides. The mouths of the rivers have silted up, so that they cannot carry off the surplus water specially after heavy rainfall. The beds of the larger rivers being raised above the level of cultivated land by a continuous deposition of silt there is wide-spread inundation whenever there are sudden freshets. In Hughly also heavy and continuous rainfall for several days on the Chotanagpur plateau causes floods in the Damodar and its branches which seriously injure the crops on its western banks. Similarly a heavy local rainfall swells the silted up drainage channels in the Sadar and the Serampur subdivisions, and as they have no outlet into the main rivers, the water overflows on either side and causes damage to crops. In the laterite portion of West Bengal the problem of agricultural water-supply is entirely different. The soil is dry and porous and the drainage rapid. Consequently the whole system of cultivation depends on the practice of storing rain-water. In fact "Terrace Cultivation" in the laterite portion of West Bengal is the result of attempts to store up rain-water. Here "The hillsides are converted into tiers of rice fields often of the smallest size conceivable which are embanked along their lower edges. The rain-water in its downward course is thus arrested and, instead of being allowed to pass down the hillside, in a torrent, is made to irrigate the fields one after another each retaining its first share and no more."[2] There is another method of artificial storage of water which we find in the district of Howrah. Water is taken in from the Hughly at spring tides and is held up by means of lock-gates in the drainage channels. Some of the smaller creeks are also dammed up, to raise the water level for impounding a supply of water for dry months.

In Central Bengal also cultivation suffers from water-logging due to defective drainage which is the curse of the moribund delta. In 24-Parganas large areas in the low-lying

2 *Gazetteer, Burdwan.* But it must be noted that these private embankments are very often inadequate and are not kept in good repair, so that sometimes there are breaches and crops are submerged and washed off.

tracts which constitute the greater portion of the cultivated area are occupied by *Bils* which may be either water-logged swamps or fresh water lakes. Some are natural drainage basins that never dry up and cannot be drained owing to their flat level. Others are connected with the river by drainage channels which bring river silt and carry off the surplus water. But in many cases these channels have silted up, so that cultivators have to wait till the swamps dry up, and if there is heavy rainfall they find it impossible to attempt tillage. In Nadia the tract known as *Kalantar* which stretches through the district in a south-easterly direction is too water-logged to bear any autumn crop. The soil here is unsuitable for regular winter crops, except the *Aman* rice crop, which is liable to be swept away by destructive floods in years of heavy rainfall or to wither away for want of moisture in years of drought. In the higher lands no irrigation can be practised for the simple reason that the surface is so uniformly level as to afford little or no scope for a canal system. In Murshidabad artificial irrigation is practised only in the *Rarh* tract owing to the peculiar conformation of the country. But in the alluvial tract the rainfall and the annual inundation of the rivers are sufficient to supply the necessary moisture. In Khulna in the older alluvial sections of the district cultivation suffers from water-logging due to defective drainage.[3] In the newer alluvial portions where the rivers and the distributaries are still active the raising of embankments to keep out salt water has resulted in serious interference with the natural process of land formation and is bound to have serious reactions on agricultural economy. As Mr. Fawcus has pointed out, " The result of the embanking of the rivers has been to cut off the spilt area which silt-carrying rivers need and has in some cases literally choked their beds with the silt which should have gone to building up the land in nature's good time."[4] In Jessore also while marshes in the eastern portion of the district are silting up owing to river action and are being reclaimed, those in the western portion have remained water-logged owing to the dearth of the rivers.

The above description of the nature and sources of agricultural water-supply in the moribund delta suggests certain

3 " In Khulna District the courses of the majority of the rivers are comparatively stable, but deltaic action or land-building is still going on; hence almost throughout the district we find water-logged saucers or pockets lying behind the high banks which fringe the river courses." (*Survey and Settlement Report.*)

4 *Survey and Settlement Report.*

important conclusions. In the alluvial tracts of Western and Central Bengal the problem of drainage which is always difficult owing to the flat level of the country, has been further complicated by embankments constructed for the purpose of irrigation or prevention of floods. Here extensive areas of land suffer from water-logging and peasants have sometimes to depend upon a single crop of winter rice which is liable to suffer from destructive floods in years of heavy rainfall. In the laterite portions of Western Bengal artificial irrigation is absolutely essential even in normal years and is barely sufficient for a single crop of rice. In Western and Central Bengal artificial irrigation is supplied by connecting private canals with the big rivers, by storing rain-water, and by constructing dams, cross-dams or weirs on the drainage channels which intersect the alluvial tracts, while a certain area of land is irrigated also from tanks and wells. But it must be remembered that the total irrigated area in Western and Central Bengal forms only a small percentage of the net cropped area. Nor is there much scope for the development of canal irrigation. In the laterite portion of Western Bengal, where artificial irrigation is the mainstay of agriculture, the surface of the country is broken up by low ridges, valleys and hills which make any system of canal irrigation impracticable. Moreover the catchment areas of many streams is so small that in a season of drought the supply of water would either fail altogether or would be so small as to be of very little use. On the other hand in the alluvial tracts it is extremely difficult to work a system of canals and distributaries owing to the flat level of the country. Moreover, a canal system cannot be commercially successful when the area covered by it, which is sufficiently flat and low-lying, can produce excellent crops by relying simply on rainfall in normal years. No doubt, as Mr. Jameson has pointed out, although canal irrigation is not a necessity in the alluvial tracts yet agriculture is benefited by the fertilising silt deposit in the canal-irrigated areas. In fact " Crop-cutting experiments show that irrigated land will produce on an average 3 or 4 mds. more per acre than non-irrigated land." But it is obviously difficult to popularise the habitual use of canal water amongst peasants when they find that they can obtain excellent crops in normal years by depending simply on rainfall. Thus it appears that artificial irrigation in the moribund delta as a whole does not possess the same importance as it has in the more arid regions of the Gangetic Plain. In normal years rainfall is sufficient and well-distributed and supplies ample moisture to the soil. But in abnormal years a considerable proportion of the cultivated

area has no protection against the failure or mal-distribution of rainfall. For example, in 1927-28 owing to weak monsoon and the failure of rainfall in October there was partial failure of the winter rice crop and considerable distress in parts of Burdwan, Murshidabad, Birbhum and Bankura. But still it is clear from the following table that the proportion of the cultivated area which was irrigated from different sources in Western and Central Bengal was small.

Districts.	Percentage of irrigated area to cultivated area.
Murshidabad	28
Burdwan	42
Birbhum	46
Bankura	34
Midnapur	4·4
Hughly	44

In the Active Delta the most important source of agricultural water-supply is the river floods. Indeed it is no exaggeration to say that the entire system of farming and agricultural security in this region depend upon what may be called river economy. In this region rainfall is no doubt more heavy and better distributed than in the moribund delta, but the growth and maturity of crops do not depend entirely on rainfall. Rainfall is indeed necessary at certain periods of the agricultural season. For example, it is necessary in February for ripening the cold-weather crops and in March for sowing the rice crop.[5] It is also necessary in September to refresh the plants at intervals as the flood goes down. In fact the winter-rice crop and the orchards need rain at the right time, although delay is not ruinous to crops. But the main work of supplying moisture to the soil is done by the floods from the great rivers, the function of local rains being simply to swell the floods and moisten the higher lands which are more or less beyond the reach of floods.

The floods of the Ganges and the Brahmaputra are not synchronous. The floods of the Brahmaputra, which come down in the month of July, depend at first upon the melting of the snow in the Himalayas and later upon rainfall in the catchment

5 It is obvious that where the percentages of the cropped area under the *Bhadoi* and the *Rabi* harvests are small, as in Bakarganj, agriculture becomes independent of the vicissitudes of the seasons.

area, when the monsoon breaks against the spurs of the Himalayas. The top of the Brahmaputra flood is reached in August, when the Ganges begins to rise and keeps the level of all the rivers high for another month. In the upper and western portion of the Active Delta the floods of the Ganges are as much important as those of the Brahmaputra. But the Ganges does not bring so great a quantity of silt to the lower and eastern section of the delta and the height of the flood there is also apparently declining, so that the agricultural productivity of this tract depends also upon the large volume of silt-laden water that is carried by the Meghna from Sylhet during the monsoon season.

The most important function of river floods, as already pointed out, is not only to supply moisture to the soil but also to build new land and deposit a fertilizing layer of silt all over the flooded countryside during the rainy season. The deltaic rivers have a sufficiently slight fall to have a depositing rather than an excavating tendency. So long as the current is fairly swift the silt has a tendency to be borne along towards the sea, but it is rapidly deposited in the slack water on the banks where it is caught by high grass or other vegetable growth.[6] It is in this way that river floods build up highly fertile land all along the courses of the deltaic rivers.[7] In the interior portions of the country also the flood water rises so gradually that it has a depositing rather than an excavating tendency and in the south-eastern portion of the Active Delta, which borders on the seaboard, the deposition of silt over extensive areas of the country is facilitated by the action of the tides interacting with the force of the silt-laden river stream.

In a deltaic country the fertility of land, which depends entirely on the activity of the rivers, varies from one tract to another according to the nature of the river action and the character of the silt deposited by the rivers. In the moribund portion of the Gangetic Delta the soil which is not annually fertilised by the deposition of silt suffers from a deficiency of organic

6 Sometimes reeds are deliberately grown to help the formation of fertile soil on sand banks.

7 It must be noted that the rivers have also a destructive tendency. "So long as the general level of the land remains lower than the pitch of an ordinary flood the rivers in the fury of the flood season continue to eat away banks; to sweep the old country through which their currents carry them and to raise fresh flats of mud to take its place a few years later. The course of a river is not a straight line but a series of oscillations which must always shift if not confined between banks of rock." (*Jack, Settlement Report, Faridpur.*)

matter and nitrogen and of chemical substances such as lime and phosphoric acid. Thus the nature of the soil is such that it is fit for bearing only a limited number of crops. In the active delta, on the other hand, the soil which is subject to annual inundation is rich in organic matter and nitrogen.[8] But its fertility depends upon the nature of river action and the character of the silt carried by the rivers. The silt deposited by the Padma has a large proportion of silica, mica and argillaceous earth and a small proportion of organic matter. Moreover the fast current of this river has a tendency to carry all the silt to the sea unless it is caught by vegetable growth in the slack water on the banks. Again the Padma has always a tendency to deposit the lighter particles of sand held in suspension before the heavier clayey matter held in solution is deposited. Now so far as clayey matter constitutes a more fertile deposit the new formations further downstream are more fertile than formations situated further upstream. On the other hand, the river Meghna carries a large amount of vegetable matter, rich in nitrogen, from the swamps of Sylhet and its current also is straight and slow. The result is that land is heavily laden with silt and is of sufficient consistency as soon as it rises above the water and is more fertile from a chemical point of view. Thus it appears that the regions which are situated near the lower reaches of the Padma and are subject to inundation from the Meghna have a more fertile soil than new formations in the upper and western portion of the Active Delta. Moreover, it must be remembered that the lower and eastern portion of the active delta owes its exceptional fertility to the action of the tides which spread the large volume of silt, carried by the Ganges, the Brahmaputra and the Meghna, over extensive areas of the country. In the deltas of the Nile and the Mississippi formation of land goes on at the point where the main waters of the river meet the salt water and the silt is precipitated. But in the Ganges Delta the action of the tides interacting with the force of the rivers distributes the silt over a very large area. Thus in the lower reaches of the delta, while on one hand the formation of land is haphazard, on the other hand the distribution of silt over extensive areas maintains the remarkable fertility of the soil. This process is clearly seen in the district of Bakarganj where we observe a striking correlation

8 It must also be noted that flood irrigation supplies oxygen to the roots of the rice plant. As the roots must have a constant supply of oxygen and as oxygen is in solution in water the floods help the growth of rice plants by making possible a slow movement of aerated water through the upper layers of mud.

between density, agricultural productivity and distribution of river silt.

Comparative Distribution of Silt as Indicated by the Area covered by Small Stream to Land Area[9]

Sub-divisions.		Proportion of Area covered by Small Streams to Land Area.
Sadar sub-division	...	3·3
Pirozpur sub-division	...	4·1
Patuakhali sub-division	...	6·7

All the rivers in Bakarganj are tidal; but water comes down these rivers at all times of the year. The country between them is covered with a network of smaller streams which carry silt and deposit it on land. In the north of the district (Sadar sub-division) the level of the country has become so high that these water-courses are dry in summer, but still they fill up in the rainy season and at spring tides. In the Patuakhali sub-division, on the other hand, they always carry water even at low tide. In the northern portion of Bakarganj the water-courses which join two big rivers have a tendency to be silted up in the middle because the tide flows in from both ends, with the result that the rivers are fast drying up and cannot get the annual supply of silt. The table given above shows the extent to which the northern tract has dried up as compared with the southern tract. And it is natural to expect that the higher fertility of land in the south should attract immigrants from the overcrowded tracts in the north in which the activity of the rivers in relation to the distribution of silt has gradually diminished as the process of land formation has been completed.

We have said that the function of river floods in the Active Delta is not only to deposit silt and build new land but also to supply moisture to the soil. Now when we consider the latter function of river floods nothing seems to be more important than the height of river floods in relation to the level of land. In the moribund delta water-logging due to annual inundation and the destructive activity of river floods have become a menace to agriculture in extensive tracts of the country. As already said this has been due to the slight slope of the country combined with obstructed drainage. In the Active Delta the rivers work out

9 The table is taken from the *Survey and Settlement Report of Bakarganj*, 1900-1908, by J. C. Jack, I.C.S.

their will on plastic mud with such characteristic thoroughness that drainage levels are adapted to different stages in the process of land formation. So long as the process of land formation continues on land lying below the level of the floods its slope is such that both the ingress and the egress of flood water are slow and gradual, otherwise the rivers would have an excavating rather than a depositing tendency. When the process of land formation is completed and the land rises to a sufficiently high level it no longer receives a large amount of silt from the annual floods and depends for its productivity more and more on rainfall. But as it has been raised higher and higher by a natural process it does not suffer from obstructed drainage and water-logging. Thus normally the height of flood water on cultivated land depends upon the level of the land as determined by the stage of land formation. It is higher on low-lying lands constituting a comparatively recent alluvial formation than on lands situated on an older alluvial. But we must also remember that the height of the floods depends also upon the volume of water carried by the rivers. In abnormal years there is a danger that the combined waters of the Ganges and the Brahmaputra may rise to an abnormal level causing wide-spread inundation. And this is possible when the Brahmaputra flood is late and that of the Ganges early. But what is the importance of the height of river floods in the rural economy of the Active Delta? In the first place, the distribution of harvests depends upon the normal height of the floods in relation to the level of land. Where the land lies at a very low level and the flood is very deep it cannot grow even long-stemmed rice, and only *Boro* or spring rice can be grown before the water rises. The land which is so high as to be above the level of the floods grows dry crops of the summer and the winter harvests and has to depend entirely on rainfall. On the other hand the land situated at an intermediate level can grow both the *Bhadoi* and the *Aghani* crops, and the relative importance of these two harvests again depends upon the level of the land in relation to the height of the floods. In the second place, the success or failure of the harvests depends upon the height of the floods. " If the water is too deep the rice plant is liable to be drowned outright or to be swept away or the vital force of the plant is exhausted in growing a stem long enough to keep its head above the water, and there is not sufficient vitality left to form good grain in the ear.[10] Moreover, high floods scour away the earth instead of depositing silt on it. On the

10 *Gazetteer, Dacca.*

other hand, if the floods are low they fail to fertilise and irrigate the higher lands.

Another important factor, on which the success or failure of crops depends to a very large extent, is the duration of the flood. To be beneficial to crops flood water must begin to cover the land in June, should rise gradually until September and then should subside as gradually. When the floods are too early the sowing of both *Aus* and *Aman* paddy and jute are delayed, while the *Ahs* crop, which has been sown late, is destroyed by floods just before it is harvested. Sudden rises when either the autumn or the winter rice is young are also very disastrous. But a sudden rise of the flood water is not very common, and if it is followed quickly by a fall, it is felt severely only near the Meghna. The floods in the Active Delta are very rarely late, but sometimes subside too early. When this is so the *Aman* crop withers in the higher lands for lack of moisture. Even in the lower lands when the floods drain off too rapidly the stalk of the rice plant collapses from want of proper support and the ears are injured by falling in the water.

The above survey of the nature and sources of agricultural water-supply in the active and the moribund delta indicates clearly the relative position of the two regions in the scale of agricultural productivity and security. In the active delta heavy and well-distributed rainfall combined with river floods have made the soil more fertile and better adapted to a variety of harvests. Except in the marsh areas the cultivators are not dependent on any single crop. The crops are distributed between different seasons in such a way that their success is independent of the vicissitudes of weather. Thus the fortunes of the agriculturists are not bound up with the character of the rainfall in a particular season. Secondly, normal rainfall is well-distributed and particularly the rainfall in the critical months of the agricultural season is so ample and certain that crops seldom fail for want of moisture. Thirdly, the river floods in June, July and August not only renew the productive powers of the soil but also make agriculture practically independent of the monsoon rainfall. Lastly, rainfall, both early and late, is so ample and certain that double-cropping can really contribute to agricultural productivity.[11] In the moribund delta, on the other hand, the soil particularly in the old alluvium can grow only a limited number of crops and the cultivators have to choose between the

11 The writer has studied this interesting question in all its bearings. Here he states only the conclusion which he has reached.

Bhadoi and the *Aghani* crops. Both the *Bhadoi* and the *Aghani* harvests depend largely on the amount and distribution of rainfall in the absence of a complete system of irrigation works. Thus the prospects of the *Aus* rice crop are seriously prejudiced by scanty rainfall at the beginning of the monsoon, while its premature termination is injurious to the *Aghani* rice crop. If the rice crop fails people have little to subsist on except maize and inferior millets until the harvesting of the *Rabi* crops in the latter part of March. But the *Rabi* crops are grown over a comparatively small area and in a year of short rainfall they are deficient both in yield and area owing to want of moisture at the time of sowing. Thus the failure of the rice crop causes economic distress which very often amounts to famine.

The contrast between the active and the moribund delta from the point of view of agricultural security is clearly seen when we study the effect of drought upon the harvests. The relative deficiency of rainfall and the relative shrinkage in the gross yield of winter and autumn rice in these two regions are illustrated in the following tables by means of the agricultural statistics for the season 1927-28 in which rainfall was not only deficient but also badly distributed.

Average Rainfall in 1927-28 *As Compared With Normal* (*in Inches*)

			Moribund Delta	Active Delta
March, April and May	Actual	...	7·38	23·49
	Normal	...	9·63	17·92
June, July and August	Actual	...	28·50	34·41
	Normal	...	34·71	49·44
September and October	Actual	...	9·05	14·50
	Normal	...	12·97	17·56

Average Gross Produce in Percentage of the Normal Yield of the Region (*100*)

			Moribund Delta.	Active Delta.
Winter Rice	...	...	40 5	83·4
Autumn Rice	...	...	41·4	69·4

It is interesting to note how the character of the season affected the outturn of crops in the active and the moribund delta. When we compare the statistics of rainfall the first thing that strikes us is that while there was a deficiency of rainfall

between March and May in the moribund delta the rainfall was much in excess of the normal in the active delta. The result was that the germination and growth of early sown crops were good over the greater part of East Bengal whereas dry weather somewhat hindered sowings in West Bengal.[12] Secondly, it appears from the statistics that the monsoon rainfall was much more deficient in the active than in the moribund delta, while there was an equal deficiency of rainfall in September and October. Let us see how the deficiency of rainfall in the monsoon season and in the critical months of September and October affected the crops in these two regions. It is obvious that a weak monsoon was bound to affect seriously the transplanting operations in the case of winter rice. In fact these operations were greatly hampered particularly in some of the districts of west Bengal. "Over considerable tracts in these districts the total rainfall was so deficient that transplanting never took place at all. This barren area would have been larger than it was had not favourable rainfall in early September facilitated further transplantation."

But it comes that while in the active delta good early rainfall combined with river floods counteracted the effects of a considerable deficiency of monsoon rainfall, in the moribund delta the deficiency of early rainfall hampered preparatory operations and the deficiency of monsoon rainfall hampered the transplantation of winter rice and the maturity of autumn rice, It has already been said that the most important factor in the growth and development of the winter rice crop is rainfall in October. In 1927-28 there was a general failure of rainfall in October. But it appears that the effects of the failure of rainfall in October were more disastrous in the moribund than in the active delta.

12 *Season and Crop Report of Bengal* 1927-28, p. 1.

IMPROVED SUGAR SALES ORGANISATION NECESSARY

BY

M. P. GANDHI.

Since the increase in the excise duty on sugar from Rs. 1 and annas 5 per cwt. to Rs. 2 per cwt. with effect from the 28th February, 1937 the course of events in the sugar industry shows clearly that, in spite of the belief of the Hon'ble the Finance Member that the duty will not affect adversely cultivators of cane, it has definitely had such effect. The sugar manufacturers have doubtless been affected by the additional excise duty amounting to about annas 7½ per maund inasmuch as they have been able to increase the price of sugar only to the extent of about 3 annas, since the 28th of February. They have thus been left to absorb about 5 annas per maund of the additional excise duty. During the year 1936-37 due to the production of sugar having reached a level where it is practically equal to, if not slightly higher than the present Indian consumption of about 11 lakhs of tons and due to the internal unrestricted competition resulting in a considerable reduction of the price of sugar, the profits of the manufacturers of sugar have been considerably curtailed and the imposition of this further burden at this stage has doubtless handicapped the manufacturers. In such a state, it would be hardly possible for them to continue crushing of cane in the months of April and May when the recovery of sugar goes down considerably from 9 per cent to say 7 per cent due to the dryage of juice in the cane. Finding that it was not possible for them to manufacture sugar at a profit, when the recovery fell to as low as 7 per cent, the manufacturers decided to stop crushing of cane. The Governments of the United Provinces and of Bihar, felt, however, that the cultivators of cane would be in a serious plight, if the manufacturers desisted from crushing cane, as large crops of cane were standing in the fields which could not be utilised in any other channel. As is well-known, the factories constitute the most profitable channel for the disposal of cane, inasmuch as the price paid by them is roughly about twice the price paid by the Khandsaris and Gur manufacturers. These

local Governments therefore appealed to the sugar manufacturers to continue crushing as long as possible, particularly as long as the factories did not incur an actual loss by crushing, and in order to enable the factories, to work as long as possible, they effected a progressive reduction in the minimum price of cane from time to time with a view to compensate manufacturers for the low recovery of sugar from cane, and the minimum price of cane in the United Provinces and Bihar was fixed at $3\frac{1}{4}$ annas per maund during the month of May 1937. They also arranged with the railways to reduce the freight on cane by 25 per cent in order to enable cultivators to get some return from their cane which would have had to be allowed to perish otherwise. While the Governments of the United Provinces and Bihar deserve a meed of praise for the very prompt action they have taken in preventing untold hardship to a large number of cane-cultivators by persuading the factories to continue crushing for a longer period, it cannot be gainsaid that in spite of the reasoning of the Hon'ble the Finance Member to the contrary, the cane-cultivators have been very adversely hit by the imposition of this sudden and additional excise duty. With a special reduction in the price of cane and on railway freights on cane the plight of the cultivators was alleviated to some extent, and the manufacturers deserve to be congratulated for generously responding to the appeal of national leaders, and of Ministers of these provinces in continuing crushing till late in this season. Had they not risen to the occasion, the cultivators would have been left with a large cane-crop in the fields, which in the absence of any other outlet, would have resultel in a heavy loss to the cultivators and would have ruined several of them completely. I also hope that, although this question does not fall within its terms of reference, the Tariff Board will incidentally refer in their report to the adverse effects of the imposition of the additional excise duty at this juncture on the industry, and cultivators of cane, and that the Government of India will give their careful consideration to the observations of the Tariff Board in this respect.

As the price of sugarcane is linked to the price of sugar, it would be very helpful to the cultivators as also to the manufacturers themselves, if they could eliminate the present internal wasteful competition in the industry and could bring about an organisation which would pool sugar prices a little higher, and thus improve their position as also of the cultivators. The Agricutlural Departments of both the United Provinces and Bihar, which produce about 85 per cent of the sugar manufactured in India feel very strongly that the sugar industry should have

some organisation by which it would be able to sell their sugar at rates somewhat better than at present, as it will benefit cultivators of cane also. The consumer of sugar will not be adversely affected by a small rise in the price of sugar, as after all he is getting his sugar far cheaper to-day than he could have dreamt of a few years ago, thanks to the miraculous development of the sugar industry during a period of five years. If prices of sugar are a little higher it would also assist the newly-established factories in Bengal to get some profits and to build up Reserves, and, as pointed out above, will be of immense benefit to the poor agriculturists engaged in the cultivation of cane also. With a fair margin of profit, the manufacturers can easily be induced to prolong the crushing season, and thus to consume larger quantities of cane, and in turn give a larger amount of money to the cultivators of cane. In this connection it will be of interest to note that the sugar mills paid about Rs. 8 crores 33 lakhs to cane cultivators in the year 1935-36.

It is understood that a proposal is now under the active consideration of sugar manufacturers for the establishment of a Syndicate for undertaking joint sales of sugar, with the object of effecting some improvement in the price of sugar. About 85 per cent of the sugar factories have expressed their desire to join such an organisation and it is hoped that they will be able to start the organisation before long to effect sales of the present stocks of sugar estimated at about 500,000 tons jointly, and to reap in a larger measure the benefits of protection to the industry. If the organisation now contemplated by the industry meets with success it will pave the way for the launching of a Central Sugar Marketing Board with effect from the commencement of the text cane crushing season in November, 1937, and due to the fair price of sugar which will be realised thereby it will doubtless improve the position of the industrialists as also of the cane cultivators without adversely affecting the consumers who get their sugar at remarkably low prices and which stand no comparison with the present price of imported sugar which is about Rs. 2½ per maund higher than the price of indigenous sugar.

CROP INSURANCE AND ITS EFFECTS ON AGRICULTURAL STABILISATION IN INDIA[1]

BY

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A remarkable experiment has recently been started in America for the purpose of building up a greater agricultural prosperity in the country through a system of voluntary crop insurance. The ultimate success or failure of the scheme will have far-reaching consequences on every agricultural country throughout the world. India is one of the greatest of agricultural countries in the world. She supports an agricultural population of about 250 millions who make up about 72 per cent of our total population. Agriculture is the greatest industry in the country. It forms the centre of economic life and activity in India. The agriculturist in India is the man who carries the burden of an empire on his back. The raiyat is India and India is the raiyat. The importance of economic planning in the life of the raiyat can hardly be exaggerated. Crop insurance is one of the best methods of economic planning in agriculture. It would revolutionise our agriculture if we can successfully adopt it on a large scale in India. He who recreates our agriculture will recreate India. We propose to consider and discuss in this paper how far it might be possible to improve the rural economy and prosperity of the country by a scheme of voluntary crop insurance.

The American Scheme.

The scheme has only recently been adopted in the U.S.A. The idea originally started with Mr. Wallace of Iowa—who is the Secretary of Agriculture in the Federal Government. Later on, it was readily taken up by President Roosevelt who appointed a strong Committee on crop insurance to enquire into the whole question, to find out if the scheme would be practicable and, if so, to make the necessary recommendations for the

1 Paper contributed to the Jubilee Session of the Indian Science Congress, Calcutta, January 1938.

purpose. The Committee reported some time back and Mr. Roosevelt adopted its recommendations as a part of his plan for agricultural reconstruction in America.

The great object of the scheme is to insure for a ever-normal granary in the country. The main idea is to provide for the insurance of crop-yields without insurance of price. The object is to build up a large reserve in good years without attempting to peg the price at any fixed level. It is not proposed to insure prices but only to insure yields. The scheme thus aims at providing for the stability of farm incomes on the one hand and preventing the exhaustion of agricultural credit on the other so as to obviate or remove the necessity of giving public relief to the farmers in times of agricultural distress.

The main features of the American Scheme.

According to the recommendations of the Roosevelt Committee, the experiment will be started with the wheat crop of 1938. If it succeeds and if the results prove satisfactory, corn and cotton will be taken up next for voluntary insurance. The Department of Agriculture has fixed the normal yields for each farm in wheat. In bumper years, the farmer will be required to deliver to the Government a certain percentage of his surplus crop, *i.e.*, of the amount in excess of his normal yield. This surplus will be stored by the Government in warehouses and elevators specially constructed for the purpose. In years of crop failure, the Government will re-deliver to the farmer enough of the crop—or its equivalent in cash—so as to give him 75 per cent of his normal yield. The scheme purposely does not give the farmer enough to provide him with the full normal—100 per cent—crop because to do that might easily result in putting the whole scheme in jeopardy. If the farmer is wholly protected against loss, he might lose all incentive or interest in getting for himself a full normal crop. He might even not try to get a crop at all in bad years. He might idle away his time and waste his energies in smoking his pipe or drinking his wine. Law has to provide for the initial infirmity of human mind. That explains why individual crop-yields are under-insured so that the farmers might be required to carry a part of the risk themselves. This would prevent them from neglecting their crops or their cultivation.

It has been calculated that insurance for all the staple crops in America can be made self-supporting if the initial cost for the first ten years—estimated at £5 millions a year—could be met by the Government. The scheme, as formulated, applies to

all the staple crops including wheat, maize, cotton and corn. It would work as follows:—

(1) Every farmer who applied for Government insurance would have his premiums assessed according to the size and nature of his " normal " crop.

(2) This premium would be assessed in kind (*i.e.*, in wheat, corn, cotton, etc.). It would be payable either in kind or cash.

(3) Crops received by the Government as premiums from insured farmers would be stored in Government warehouses against the lean years. Additional supplies might also be purchased by the Government with monies received in cash premiums.

(4) An insured farmer whose crop, through no fault of his own, fell below his assessed " normal " crop, would have the difference made up in warehouse certificates drawn on the Government stored supplies of staple crops.

(5) These warehouse certificates would be salable, or the farmer could, if he wished, actually collect the crop in kind, to sell with whatever remained of his own.

Simultaneously with crop insurance on the one hand, the system of crop control will continue as before so as to prevent excessive accumulation of surpluses.

The scheme has been warmly welcomed by farm leaders and agriculturists throughout the United States. Legislation for a voluntary system of crop insurance was recommended by President Roosevelt in his message to the Congress in February last. The Agricultural Committee of the House of Representatives agreed in April last to a five-year programme involving a total outlay of several million pounds. The Bill adopted by it generally follows the Government's recommendations with some important changes which, by way of compromise, modifies the far-reaching scope of the Roosevelt scheme. The whole world will watch with profound interest the result of this great and ambitious experiment in rural reconstruction.

The Advantages of the Scheme.

The social and economic advantages of the scheme are quite manifest. These advantages are not particular or special to

America. They will hold good whenever and wherever the scheme is adopted, so that if we can adopt the scheme in India at any time in the future, we will derive all these advantages for ourselves. The advantages might be briefly stated as follows:—

(1) It will ensure a steady and normal food supply in the country through an "ever-normal" granary. It will stabilise the supply of food-stuffs and other commercial crops throughout the country from year to year.

(2) Thus, it will protect the consumer from wide and violent fluctuations in prices due to occasional short crops or total failure of crops. The stabilisation of prices would be of immense advantage to all consumers—especially to those in the urban areas.

(3) It will yield a more stable income for the farmer by protecting him against the chances and vicissitudes of the seasons. The hardships which inevitably follow from a bad season will be greatly minimised. The stability of farm income will mean the stability of agricultural prosperity.

(4) It will save or reduce the load of heavy debts which always overwhelm the agriculturists in years of crop failure. The robbery of the usurer will cease or, at least, it will be greatly reduced and that will be one of the greatest of boons to the cultivators.

(5) The farmer would be assured of enough resources to live on and maintain the usual standard of living for himself and his family. A sudden drop or deterioration in the standard of living always leads to disastrous results. It leaves behind a trail of the most undeserved and cruel agonies of life. The scheme of crop insurance would automatically be a scheme to insure the standard of living for about 72 per cent of the people in the country. The scheme will thus yield its dividends not merely in cash and kind but it will yield far higher dividends in the greater happiness, comfort and social repose in millions of cottages and huts throughout the country. It will mean better life and a fuller life for millions. It will bring

about a real harvest of joy and plenty in millions of homes.

(6) It would also stabilise the purchasing power of the cultivators and make it more or less even from year to year. Ordinarily, when in course of economic cycles, a bad year comes in, millions of cultivators suddenly find that a large part of their purchasing power has evaporated. The tragic decline in their purchasing power not merely means tremendous hardship and misery for them alone. It also means that trade and industry throughout the country suffer badly from the deadly mildew of agricultural depression. If the cultivator is prosperous he will buy more of cloth, salt, sugar, kerosene, matches, fuel—in fact, more of every thing. On the other hand, if he is down and out then every industry in the country or abroad which supplies the millions of cultivators with innumerable commodities feel the burden of depression and suffer accordingly. The economic anaemia of the cultivators—who constitute the greatest market in the country—cannot but leave behind it the economic paralysis of all the other industrial activities in the country. A system of crop insurance by giving the cultivators a steady and even purchasing power from year to year will help in stabilising economic conditions throughout the country. That would indeed be one of the greatest advantages of this scheme.

(7) Agriculture is always a very uncertain industry due to the vicissitudes of nature. It is a gamble in rain, climate, season and weather. It is the sport of floods, locusts, pests and markets. There are so many uncertain factors which determine agricultural conditions that the cultivator is by nature and by the sheer logic of circumstances the greatest gambler in the world. The system of crop insurance will eliminate one great factor of uncertainty—as all insurance does. The cultivator will now be able to plan better and to reorganise his farm on more economic and business-like methods. It will greatly help towards commercialising the farms and putting them on

safer and sounder business basis. In good years, he will no longer waste his surplus on extravagant social ceremonies or on drink, litigation and gambling. He will be obliged to make a *pro rata* contribution out of his surplus for his future needs. It will thus save him from his own folly and it will protect him from his own weakness.

(8) Lastly, it will relieve the public treasury of a considerable amount of the burden that it has to bear from year to year on account of the cultivators. At the least sign of distress, the cultivator and his industry become a charge on the state. In spite of the initial costs of the scheme, if the system of crop insurance can gradually relieve the state of sudden and fitful calls for extraordinary public expenditure on test works and takavi loans, on famine relief or on suspension and remission of land revenue, on Cooperative Societies and on other various reliefs to farmers who are impoverished by drought then it will go a very great way in stabilising our finances. It will save our finance from frequent shocks and jerks by which it is often derailed into the ditch.

Essential Requisites of the Scheme.

Before such a scheme can be adopted, there are certain requisites which are essential to its practical working. These might be briefly indicated here. A vast amount of patient actuarial research is needed before such a scheme can be adopted and worked. It would be necessary, first of all, to find out the normal yield figure for each farm in each particular crop that it grows. This is a fairly difficult proposition in India where most of the cultivators—being illiterate—keep no accounts and have no idea of running the farm as a business. Further, conditions of cultivation vary so widely from one area to another, crop-yields depend so largely on fertility, irrigation, rainfall, manuring, the system of rotation, facilities of communication and opportunities of scientific agriculture that it would be dogmatic to lay down any general formula that would apply accurately in all cases. The question is not so difficult in America where, due to wide spread of education and greater level of general and specialised intelligence, agricultural practice and methods are more uniform,

more methodical and far more standardised than it is the case in India. The American farmer runs the farm as a great factory. The rude old agriculturist has been replaced by a highly educated first-class captain of industry. Four-fifths of the farm work is now done by machinery. Hence the problem in India is much more difficult than that in America. The average yield of the farmer in a period of, say, 7 years during which a normal cycle of good and bad years would once go round—calculated for a representative farm might form the basis of calculation. In any case, such calculations, to be useful, must be strictly regional and local in character—varying from place to place as explained already.

The problem of storage is another serious difficulty. The Roosevelt Committee in America recommended that in view of the immense public alvantage of the scheme, the cost of storage should be borne by the Government together with all overhead costs of administration. Federally bonded warehouses or state licensed warehouses would be specially provided for the purpose of storage by the Government in America. We deal with it in detail later on.

Difficulties of the Scheme in India.

The first great difficulty of the scheme in India would be the probable attitude of the cultivators themselves. All insurance inevitably means a certain sacrifice of the present enjoyment and benefits for a remote and certain benefit in the future. This naturally connotes a certain amount of telescopic faculty in the individual who is seeking the insurance. He must be able and willing to look beyond his nose. He must possess a sufficient mental equipment which would enable him to sacrifice the present benefit for the remote gain. Now, so far as our agriculturists in India are concerned, it would be foolish to imagine that even a microscopic minority of them has the requisite telescopic faculty which is essential for the purpose. The size of premiums which have to be paid will undoubtedly frighten and repel quite a large number of the agriculturists who would prefer to remain outside the scheme. Any attempt to force a premature scheme might easily lead to disaster. At the same time, it is equally necessary to make a determined effort to train and educate the agriculturist and prepare the ground for a scheme that will ultimately put a seasonal and uncertain industry on a more secure and sound basis. A telescopic faculty will no doubt grow in time. It will grow slowly with education. But there is not only no harm but there is positive gain in somewhat forc-

ing the pace by introducing a scheme of voluntary crop insurance as early as possible. If the cultivator does not want to move, he has to be led. At the same time, it cannot unfortunately be denied that the majority of our cultivators are so poor, their surplus in good year is so limited,—and it is already so heavily mortgaged in advance—it may be—several times over—and that he has already—and at all times—so many urgent expenditures on his waiting list, his volume of indebtedness is already so heavy and he is always so much under the threat of ejectment or litigation by his landlord or his mahajan that for him to pay a certain percentage of his surplus crop year after year may be very difficult—if not impossible. People who can hardly make—or cannot make—a bare living are not the people who can afford to buy insurance.

The determination of the premiums which will have to be paid will make the second difficulty. We have already referred to it above. The same premium cannot apply with equal justice to the different parts of the country. As the risk of crop failure varies from place to place, the amount which the agriculturist must pay for protection against crop failures must also vary. In America, Government actuaries have carefully calculated the cost of the scheme and the premiums that the farmers would pay. For instance, it has been calculated that while a farmer in Maryland or Virginia need pay only 25 per cent of his surplus crop in good years in order to be entitled to a 75 per cent indemnity for crop failure, a farmer in Montana must pay at least 65 per cent of his surplus to get the same cover. In India a 25 per cent tax on the surplus might probably rope in a small percentage of the agriculturists but a 65 per cent tax would certainly keep out all. Further, in India we have not got the requisite expert staff to make the necessary actuarial calculations for the vast country. A staff imported for the purpose would be of little use in the absence of adequate local knowledge. Besides, it would be very costly to import such a staff from abroad. Our crop records are inadequate. Our statistics relating to crop-yields are neither satisfactory nor complete for a large part of the country.

The problem of storage would also present a serious difficulty. Local warehouses will have to be constructed all over the country because agricultural commodities are bulky and it will add to the cost if they have to bear long carriage for the purpose of storage. The problem of adequately guarding the storage from theft, and protecting it against damp, fire, floods, rains, insects and dust would be really difficult. The question

was exhaustively considered by the Banking Committee some years ago and it has discussed the practical limitations of the proposal in its report so that it is unnecessary to deal with them here.

Lastly the cost of the scheme would be the real difficulty in the way. America is a very rich country and she can afford to go in for many new varieties of social and economic legislation which might be beyond our reach in India. The initial cost there for all the staple crops for the first ten years has been estimated at £50 millions. In India, we cannot even dream of such huge amounts—particularly in the present state of our financial position. But we can certainly make slow and cautious beginning. We can begin with a few selected areas where conditions are favourable and premiums would be low. We can begin with only one standard crop in each area and we can also reduce the insurance cover from 75 to 50 per cent so as to minimise costs. The Government might insist on a minimum amount of participation from a particular area before the scheme is sanctioned. Further, we must also remember—what we have already explained above—that the initial cost will be greatly set off by the substantial relief to the Treasury in other charges which the state must meet at any time of serious agricultural drought and distress. On a study of all these considerations, it might be a prudent policy to plan ahead and enquire into the possibilities of the scheme in India. The Government of India might just as well appoint a small committee to consider the whole question in detail and find out how far it might be possible to adopt the scheme in India with such modifications as might be found necessary on practical considerations. Anyhow, it might be in the real interest of the country to make a modest start in a few selected areas. If the experiment succeeds, we might then think of bigger schemes which would ultimately revolutionise our agriculture.

INDIA'S PROTECTIVE TARIFF POLICY UNDER MONT-FORD REFORMS

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Fiscal Autonomy Convention.

The Mont-ford Reforms ushered in the new era of fiscal autonomy convention in India. About this convention the Joint Select Committee of both the Houses of Parliament wrote in their report, ' Whatever be the right fiscal policy for India, for the needs of her consumers, as well as for her manufacturers, it is quite clear that she should have the same liberty to consider her interests as Great Britain, Australia, New Zealand, Canada and South Africa. In the opinion of the Committee, the Secretary of State should as far as possible avoid interference on this subject when the Government of India and its Legislature are in agreement and they think that his intervention when it does take place, should be limited to safeguarding the international obligations of the Empire or any fiscal arrangements within the Empire to which His Majesty's Government is a party.' This convention as recommended by the Joint Select Committee was accepted by the Secretary of State on behalf of His Majesty's Government in his despatch of the 30th June, 1921.

Implications of the Convention.

It must be borne in mind here that although from the administrative point of view this convention meant a big step forward, from the point of view of the Indian people it did not confer on them in substance what it purported to give, because India did not enjoy the status of a self-giverning dominion. Although the convention substantially limited the intervention of the Secretary of State in India's fiscal affairs, the Government of India not being responsible to the Indian Legislature she could not benefit herself sufficiently by its operation and the policy of protection to Indian industries has not so far been followed to the satisfaction of the Indian people. Whatever protection India's industries have been able to get has been at the sweet pleasure of the Government of India which is a subordinate

branch of the Imperial Government receiving orders from their masters on all questions of policy.

Majority and Minority Reports of the Fiscal Commission.

However, the fiscal autonomy convention made it possible for the Government of India to appoint a Fiscal Commission, a thing which they could not do so far, ' to examine with reference to all the interests concerned the tariff policy of the Government of India, including the question of the desirability of adopting the principle of Imperial Preference, and to make recommendations.' The Majority of the Fiscal Commission recommended ' a policy of protection to be applied with discrimination along the lines of the Report.' The Minority of the Commission which consisted of those intimately connected with Indian industries did not agree with the said recommendation of the Majority. The Minority stated, ' In our opinion there should be an unqualified pronouncement that the fiscal policy best suited for India is Protection.' They objected to the Majority recommendation because firstly, it mixed up policy with procedure, secondly, by emphasising the method of carrying out the policy, the vital issue of the problem was obscured and thirdly, it ignored the fact that every country applied Protection with discrimination suited to its own conditions. Further the Minority differed in their outlook from their colleagues. They stated, " Our colleagues anticipate as a result of the qualified policy of Protection which they recommend that ' India for many years to come is likely to concentrate on the simpler forms of manufactured goods.' A policy which is likely only to lead tc this result for many years to come is not and cannot be acceptable to the people of India."

Discriminating Protection.

As a matter of fact the Minority view of the Fiscal commission was and even to this day has been very largely in confirmity with the aspirations of the Indian people. But the Government of India true to their traditions accepted the Majority view of the Fiscal Commission. The procedure recommended by the Majority and accepted by the Government of India for putting into practice the recommended policy of Discriminating Protection has been that when an application for protection is received and the Government feel that the claim deserves investigation the application is referred to a Tariff Board who have to adhere to the method and procedure of inquiry as laid down by the Majority of the Fiscal Commission in their report. The Fiscal Commission laid down three conditions which an industry

claiming protection must satisfy. Of these the first condition is that the industry claiming protection must possess natural advantages, such as an abundant supply of raw material, cheap power, a sufficient supply of labour or a large home market. Various inquiries conducted by the Tariff Board have shown that while many of the industries claiming protection did not find much difficulty in satisfying the last three conditions, the first one proved a stumbling-block in their way.

Tariff Boards' Interpretations.

The Tariff Boards that examined the cases of various industries from time to time had to take a lenient, rather a practical view about the condition of an abundant supply of raw materials.

Paper Industry's Dependence On Imported Pulp.

The Rainy Tariff Board recommended protection to the Indian paper industry although wood pulp which forms an important variety of its raw materials is to this day imported in considerable quantities. The Tariff Board in recommending protection observed, 'India's abundant supplies of bamboo are likely to become the basis of a considerable industry, capable not only of meeting the country's requirements of paper, but of exporting substantial quantities of paper pulp. If the world prices of paper were to remain at their present level, it might be many years before Indian bamboo could profitably be developed as the raw material of pulp and paper. But the rapid elimination, both in Europe and America, of the supplies of coniferous wood suitable for pulping justifies a belief that an increase in the price of paper is inevitable, though it may be slow. It is this most important factor which makes it worth while for the Government of India to take action now to assist the manufacture of paper from bamboo.'

Match Industry and Inadequate Supply of Match Wood.

When the Indian Match Industry claimed protection the difficulty about the abundant supply of raw materials had to be faced but here also the Ginwalla Tariff Board put an elastic interpretation on the first condition of the abundant supply of raw material. It was doubtful at the moment that India could supply all the wood necessary for the manufacture of splints or match boxes. But the Board did not set aside the claim of the Industry for protection. They stated, 'Although no general

enumeration of trees suitable for match manufacture has been undertaken, it is probable that in Burma, Bengal, Assam, the United Provinces and the Punjab there is an assured supply of timber sufficient for manufacture of about 8 million gross of matches annually or nearly half of the total demand in India. In Bombay on the other hand the supply of Indian timber is inadequate and manufacturers must rely on imported aspen. Since it is important for the future of the industry that the price of the match wood should be kept as low as possible, while it is desirable in the national interest that the country should be self-supporting in regard to this essential material, we recommend that a cautious programme of plantation should be undertaken by Government . . . . In the circumstances we consider that the claim to protection has been established.'

No Insistence on Conditions not Satisfied by Competitors.

The Tariff Boards that reported in 1927 and 1932 on the case for protection put forward by the Cotton Textile Industry had to consider whether the goods produced from higher counts spun from foreign imported cotton deserved protection. The Majority of the Noyce Board recommended the grant of bounty on the production of yarn of counts 32s and over. They stated, 'We consider that it is essential that Bombay should utilise to the full the natural advantages it possesses in the matter of climate and of its situation in respect of imports of American or African cotton for the production of goods of higher quality than it has done in the past . . . We are of opinion that it would be to the advantage of the Bombay mill industry to follow the example of the Japanese industry and to make a more extensive use of African and American cotton in order to enable it to place on the market qualities of cloth superior to those it is at present manufacturing . . . The present position is that its natural development is hampered by unfair foreign competition and this strengthens the case for assistance to enable it to meet that competition.

'. . . and the question, therefore, mainly resolves itself into one of the extent to which suitable cotton is available and of the possibility of converting it into yarn on an economic basis . . . India is at some disadvantage in regard to the local supply of suitable raw material but it is to be expected that the work of the Indian Central Committee will effect a rapid improvement in this respect and, in the meantime, such supplies of suitable Indian cotton as are available can, wherever necessary, be supplemented by imported cotton.'

The Matthai Board in their report while discussing this question observed, ' For the production of yarn of counts higher than 40s. it is admitted that no suitable raw cotton is now available in India; nor does there appear to be any definite prospect of such cotton being grown in India. It has therefore been suggested that there is no case for the grant of protection to the manufacture of higher counts than 40s or of cloth woven from such cloth . . . The consumption of cloth represented by yarn of counts higher than 40s is therefore not more than 20 per cent of the total. It is to this extent that India as far as we can foresee will be dependent on imported cotton. We are definitely of the view that when an industry is able to obtain its raw material up to 80 per cent of total requirements in India it fulfils substantially the first condition of the Fiscal Commission. It is misleading under the conditions of manufacture prevailing in India to regard the cotton textile industry as being composed of entirely separate branches according to the class and kind of cloth woven and to look upon each branch as a separate industry as regards the claim to protection . . . We do not feel justified in any case in applying to the Indian industry a condition which is not fulfilled by her chief competitors since both the United Kingdom and Japan depend on imported cotton for the whole of their requirements . . . Unless Indian mills are helped to undertake production of finer counts, there will be little inducement for carrying out experiments regarding the possibility of growing cotton of superior grades in India. It is rash to conclude that no cotton of the kind suitable for finer counts can be grown in India, for unless experiments are undertaken to this end, no satisfactory conclusion can be reached and such experiments are not likely to be undertaken if there is no demand from Indian mills for superior cotton.'

Industry of Supreme National Importance Need Not Satisfy Conditions of Fiscal Commission.

The Ginwalla Tariff Board discussed the question of the grant of protection to the Indian Heavy Chemical Industry. India has no indigenous supply of sulphur which forms an important raw material of the industry. But the Board did not invalidate the claim of the industry for protection on that account. They discussed the alternative sources of supply ' which however uneconomical under present conditions of transport and scientific development, according to expert evidence offered a sufficiently promising field for experiment and research,' and observed, ' In our opinion the case for protection

of the chemical industry rests primarily on the fact that it is an industry of supreme national importance and even if the conditions laid down in Paragraph 97 of the Fiscal Commission's report were not fulfilled we feel that it would be impossible for us, consistently with public interest, to refuse the claim of protection of an industry on which so many national activities depend in times of peace and in times of war.'

Indian Glass Industry and Matthai Board's Reply to Government's Objection.

The Matthai Tariff Board considered the claim of the Indian Glass Industry for protection. Soda ash which forms part of the raw materials of the industry has to be imported and the view taken by Government in 1927 when the industry applied for protection was that the industry could not be said to enjoy any natural advantage while it was dependent on imported soda ash. In meeting this objection raised by the Government the Board wrote in their report, 'The Fiscal Commission in laying down their first condition, recognized that the relative importance of natural advantages mentioned in it would vary according to the circumstances of each industry and that in examining the claim of an industry to protection it was essential to determine the relative importance of any natural advantages which might be lacking. Soda ash is at present imported by the Indian glass industry although . . . the materials required for manufacturing it are present in India . . . Even if the industry was confined permanently to the use of imported soda ash, we should still be hardly justified in rejecting the claim to protection unless it was found that on the balance the industry did not possess sufficient natural advantages . . . If the importance of various raw materials is considered with reference to the proportion in which they enter into the composition of glass, soda ash is of much less importance than sand . . . In determining the position of the Indian glass industry as compared with that of the other countries, it is necessary to consider the extent to which the disadvantage in respect of soda ash is counterbalanced by advantages in other respects . . . Whether the sum total of these advantages is sufficient to offset the disability resulting from imported soda ash can only be determined by an examination of the future costs of the Industry . . . Meanwhile it may be stated that the estimates of cost set forth . . . support the conclusion that if reasonable improvements are effected in equipment and processes of manufacture and if a larger output can be secured, the Indian glass industry will be able eventually to

meet foreign competition unaided . . . If at the price of soda ash at which it is now imported, the Indian glass industry may be expected ultimately to dispense with protection it necessarily follows that the handicap imposed on the industry by its having to import soda ash is sufficiently balanced by the advantages which it possesses in other respects. On this view of the case we hold that the fact that the Indian glass industry is now dependent on imported soda ash does not invalidate the claim to protection especially when there is a reasonable prospect that the manufacture of the material in India will be resumed almost immediately.'

Justification of Woollen Industry's Claim.

The Wills Tariff Board examined the claim of the Indian Woollen Industry for protection. The industry has two branches, namely, the woollen branch and the worsted branch. So far as the first condition of the Fiscal Commission is concerned in the first branch a portion of the raw material has to be imported while in the second branch the raw material is not available in India. Still the Board upheld the claim of both the branches for protection. The Board observed, 'We need have no difficulty in holding that the woollen section of the industry has natural advantages in respect of raw material. It is true that the Indian wool is of inferior quality and that it must, if the industry is to compete in the better qualities of fabric, either be improved or supplemented by better qualities. But it is also true that out of approximately 37 million pounds of wool estimated to be consumed by this side of the industry at least 30 million are Indian wool and almost all the balance is East Indian wool of better quality most of which finds its natural outlet in India. There is abundant material of the same quality at present exported and available for expansion. We think on the woollen side this part of the condition is satisfied.

' . . . . The small factories of the Punjab, and elsewhere are turning out excellent fabrics, and the old established handlooms of the hereditary weavers of fine woollen tissues are still an essential part of the industry, and their survival is, in our opinion, no less important a consideration. . . . . In our opinion the industry even in the incompletely developed form in which it exists today is in danger of being crushed by this competition, and that it is in the interests of the country that it should be protected.'

In the worsted branch the raw material is not available in the country. Still the Board recommended protection. They

stated, ' The raw material for worsted manufacture can be obtained to a limited extent from East Indian wools, and hardly at all from Indian wools, and then only in the cross-breed qualities. It is certain that for as long a period as we can foresee, worsted manufacture will mainly depend on foreign supplies for its raw material. We are not disposed to stress unduly the failure to meet this condition (regarding abundant supply of raw materials), for the worsted industry of all the chief competing countries is in exactly the same position and the ancient worsted industry of India has been forced by the competition for a better wool to go abroad for its supplies. India in fact is exchanging its surplus of inferior carpet wools for superior qualities.

Government's Action On Tariff Boards' Findings.

As quoted above, although the Tariff Boards have, on several occasions, put a reasonable and commonsense interpretation on the first codition of the policy of Discriminating Protection laid down by the Majority of the Fiscal Commission and accepted by the Government, it has not been always that the Government have accepted their logic. Acceptance or otherwise of the recommendations of the Tariff Board has depended on the view taken by the Finance Member of the Government of India about the correctness or otherwise of the interpretation put by the Tariff Board on the conditions laid down by the Majority of the Fiscal Commission and about the all-sided or otherwise nature of the inquiry so conducted.

The following statement by Sir Muhammad Zafrullah, Commerce Member of the Government of India, laid on the table of the Legislative Assembly on February 13, shows the cases in which the recommendations of the Tariff Board which were either not accepted or were accepted in a modified form:—

Increase of duties on Steel (1924) : The recommendations accepted in a modified form.

Grant of protection to the Cement Industry (1925) : The recommendation to pay bounties on cement consigned from an Indian factory to the ports or to railway stations within a specified radius of the ports was not accepted.

Grant of protection to the Cotton Mill Industry (1927) : The recommendation by a majority of the Board for payment of a bounty on yarns of higher counts was not accepted. The recommendation by a majority of the Board to increase the import duty on cotton piecegoods from 11 per cent to 15 per cent *ad valorem* was not accepted.

Grant of protection to the plywood and tea chest industry (1927): The recommendation for an export duty on tea packed in chests not made in India was not accepted.

Heavy Chemical Industry (1929): Recommendations accepted in a modified form.

Salt Industry (1930): Recommendations accepted in a modified form.

Continuance of protection to the Cotton (Textile) Industry (1932): Recommendations accepted in a modified form.

Grant of protection to the Sericultural Industry (1933): Recommendations accepted in a modified form.

Grant of protection to the Glass Industry (1932): Recommendations not accepted.

Removal of tariff inequality in respect of Healds and Reeds (1934): Recommendations not accepted.

Grant of protection to the Woollen (Textile) Industry (1935): Recommendations not accepted.

Excuses For Rejection.

In many cases, the recommendations of the Tariff Board were turned down by Government on the ground that the industry did not possess an abundant supply of raw materials as envisaged by the Majority of the Fiscal Commission. The recent case of the Indian Glass Industry is an instance in point. Another excuse for not accepting the proposals of the Tariff Board was that whole of the industry did not present its case to the Board and, therefore, they reached their conclusions on insufficient information. The case of the Indian Woollen Industry furnishes a good example of this. As it is the Tariff Board has no powers to compel all the manufacturers in the industry, the case of which is under investigation, to supply the necessary relevant data to them. This handicap must be removed immediately.

In this connection the Wills Tariff Board wrote in their report, ' The abstention of an important section of the Industry from any useful part in this enquiry raises once again in a more acute form the need for investing the Tariff Board with power to call for evidence. We can understand the reluctance of any unit of an industry to furnish for publication figures relating to their internal administration. But we think it wrong that any section of an industry which is applying for protection should be able, by refusing to supply statistics even in confidence, to prevent an effective enquiry and so jeopardise the position of the rest of the industry.

Lines of Reform of Tariff Policy.

The progress which the country has made towards industrialisation since the adoption of the policy of Discriminating Protection has fallen much short of the aspirations of the people. The policy recommended by the Majority of the Fiscal Commission is obsolete and, if adhered to in future, will not lead the country much further towards the goal of industrialisation. The Tariff Board is handicapped by the steel frame of the conditions which an industry claiming protection is required to satisfy very meticulously. The condition regarding an abundant supply of raw materials must not be rigidly insisted upon, if the industrial progress of the country is to be achieved on a scale found in western countries. Several instances can be quoted of countries that have developed industries without the existence of an abundant supply of raw materials and a home market. India's Cotton Textile Industry needs protection against the competition of Japan and the United Kingdom. But who does not know that none of these two countries produces Cotton? Much water has flowed down the Jumna since the Majority of the Fiscal Commission made their report, and therefore, the Government's attitude in fiscal matters based on that report needs a radical change. Government's industrial policy must be one of full-fledged protection and the Tariff Board must be made a permanent institution entrusted with the task of recommending schemes of protection that will lead to the rapid industrialisation of the country on proper and sound lines, the Board being left unfettered in its enquiry by the steel frame of conditions like the one already in operation. Further, as a general rule the Government must place the report of Tariff Board along with their views on it before the Legislature, within a short period of its submission, say, of three months. Economic salvation of the country lies in taking off the burden of surplus population on land which can only be accomplished by rapid industrialisation of the country that will in its own turn provide increased avenues of employment. Only a reorientation of the tariff policy on the lines suggested above will materially help to bring this about.

RURAL DEVELOPMENT IN THE UNITED PROVINCES

BY

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The United Provinces Government have appointed a Committee to suggest necessary changes in the land system and in the meanwhile have undertaken a big drive for rural development.

The first point that I desire to submit for the consideration of the Government is that they should keep the old Indian dictum that life is an indivisible whole constantly in mind and should never forget that the western conception of life as being divisible into so many water-tight compartments is not applicable to all spheres of life. It is the undiluted application of the conception of divisibility to the economic field that is very largely responsible for over-production at one time and under-production at another resulting in crises of one kind or another. The plans of rural regeneration so far adopted by us in India have been mostly based on this western philosophy of life and as a result have sadly failed to bring about any appreciable change in the life standards of the people. By what he is reported to have said recently at Cawnpore the U. P. Premier would also appear to think that rural-uplift could be brought about by concentrating on the village and agriculture. This attitude, I may be permitted to submit, is far from sound.

If we are anxious to regenerate our village we must conceive the village as an organism with a number of limbs where each limb is designed to perform a distinct function and in which all the limbs and functions are so co-ordinated that they contribute to the preservation and organised growth of the village as a whole and not of this or that part only. Then we must constantly keep in mind that the village is a part of that larger organism the Province and its development must be co-related and co-ordinated with the economic development of the Province.

If the above line of thought is accepted as the correct way of approaching the village problem in India, then what the Provincial Government should do, as I am happy to find, they

have already done, is to develop an Economic Development Board for the whole Province. This Board should approach the problem of development from all sides and not from the rural side only.

Under the supervision of this Board the Province should be divided into homogeneous regions and the economic development plan for each region should be worked out, and taken in hand systematically. It is not necessary to start work simultaneously on all regions. The limitations of funds as well as of suitable men to carry the plan into effect would suggest that we should take only one region at first in hand and when experience would have been gained in that one region we proceed to another.

The deliberative and planning part for every region as also its coordination with the development plan for the whole Province should be the work of the Provincial organisation. But for carrying into effect the plan of a particular region we should have an Executive Board consisting of, not more than three persons with sufficient initiating, directive, controlling and financial powers to bring the plan into effect. This regional Board might start with such regional works of utility as the construction of regional roads, canals, drainage schemes and so forth, and might detail the construction of similar works necessary for districts or part of a district to the proper local authorities, and then see that the work detailed has been carried out.

And then we reach the village itself. Here we must revive the village Panchayat not in its present form as a mere judicial tribunal for adjudicating petty suits, but as a genuine village authority. In our new order of things the village Panchayat must be a corporate body like the District Board. Besides the ordinary civic duties which we find the Panchayats assigned in the Presidency of Madras such as keeping the village roads and streets clean and lighted, the village rubbish properly disposed of, it must look to the proper organisation of village life in its economic and non-economic aspects. In short it must be the chief directing and administrative authority of the village. I note with pleasure that the plan adopted by Government contemplates the revival of the Panchayats. But as details are lacking it is difficult to form any idea of things as they are going to be.

The State should do away with the landlord class and the rights that are now enjoyed by the landlord should be vested in the Panchayat. That is to say, we should vest the proprietary right in the village community and each individual cultivator should be a tenant of the community. As at present we should continue to have periodical settlements on the existing lines but

in accordance with well thought-out statutes. The village Patwari as at present should continue to be the chief representative of the Provincial Government and should, as now, continue to maintain the village records. But the police, sanitation, administration of building regulations, water-supply, both for agricultural and domestic purposes, village roads, playgrounds, grazing common, common meeting-place, rest-house, development of agriculture, medical relief, veterinary service, arboriculture, education, cooperative credit, and other cooperative activities should all be entrusted to the village Panchayat. The present practice of having a separate agency for everything should be discontinued, as it means waste of good money and subjects the people in the village to periodical visitations of big and small government officials who instead of doing any effective work simply bewilder the villagers with their spasmodic and uncoordinated attempts at betterment.

Within the village each cultivating family should be given a consolidated holding of sufficient area which on an average would yield an income of Rs. 100 to Rs. 120 per annum per head. Large families should be assigned bigger holdings while smaller families should be given smaller holdings. As there can be no fixed area which could be recommended as an economic holding, the area that the Panchayat would assign to a particular cultivating family should be left to be determined by the Panchayat periodically according to the resources of a family in labour and capital and according to the needs of each individual family, subject to that one general qualification that on an average the holding would yield an income of Rs. 10 per head per month. Rates of rents per acre in kind for the various classes of soils, varying with the crops raised, as under the Akbari system, in the village should be fixed at the time of Settlement and should be changed into money rents every year according to the prevailing level of prices.

If the system outlined above is adopted it would do away with suits for the enhancement of rents, ejectment of tenants and so forth. Each cultivator under this system would have a claim, during his lifetime, over the village community to provide for him a certain area for cultivation purposes, but would have no right in any particular piece or pieces of land in the village. All such problems as are connected with the fragmentation of holdings and scattered character of holding will have automatically solved themselves. Besides it would have eliminated the fissiparous tendencies inherent in the Hindu and Muslim Laws of inheritance without causing any change in them.

The scheme detailed above though simple on paper is yet full of difficulties. The first difficulty arises in connection with the present zemindars and Taluqdars. I have already stated that this class should be abolished. Should their rights be confiscated without any compensation or should they be given some compensation? Neither equity nor humanity would allow me to recommend confiscation without some compensation. Each zemindar or Taluqdar to start with should be given option of taking under self-cultivation a reasonable part of his landed property and this land he should hold as a tenant of the village community at say 25 per cent less rent than the rent payable by other tenants in the village for the same class of land. For his proprietary rights in the rest of the land he should be given fifteen to twenty years' rental value as the purchase price in the form of self-liquidating bonds of the Provincial Government for a period say fifty or sixty years. Zemindars whose rental income after paying land revenue is below Rs. 5000 per annum should get twenty years' rental value as compensation for the loss of their property; while those whose income is between Rs. 5000 and Rs. 6000 should get 19 years' rental value and so on till we reach the zemindars whose income is either rupees ten thousand or above rupees ten thousand per annum. Such zemindars and Taluqdars should be given compensation on the assumption that their rental income is rupees ten thousand per annum, whatever their present income may be, that is, they should be paid fifteen years' rental value as the purchase price. This would in practice mean part confiscation without compensation of very large properties, maintenance of which though thoroughly justified under a capitalistic regime is not at all justifiable under a system of government whose declared objective is to provide the largest measure of well-being to the largest number of citiznes of the country and to minimise inequality as far as practicable.

Another problem that would arise from the scheme that we have outlined would be the provision of funds for paying annuities to the dispossessed landlords and their descendants. The total amount to be paid annually by the Provincial Government should be distributed over the various village Panchayats in the Provinces and should be the first charge after the payment of Government revenue on their rental income. This would according to my calculations take away something like 20 to 25 per cent of their rental income. So that if the Provincial Government take away 40 per cent as land revenue, and another 20 per cent for the payment of annuities, then 40 per cent will be left

over with the village Panchayats and the District and Local Boards for spending on the local services. At present they get between them $6\frac{1}{4}$ to $12\frac{1}{2}$ per cent of the Government revenue.

With 40 per cent of the rental left both the village Panchayat and the local Boards will have been provided with goodly resources for the various services to be placed under them and then their income from land would be supplemented by other items of local income such as registration fee of marriages, tax on houses, fees for the adjudication of suits and so forth in the case of village Panchayat, and tolls on roads and income from other commercial services such as minor canals, or hydro-electric works, or light railways and buss services and so forth by the Local Boards.

Another interesting problem that would arise from the above scheme would be what is to be done with the dispossessed and annuity-receiving zemindars and for the dispossessed cultivators. I have alreay suggested that each zemindar should be offered the option of taking certain area of land under his self-cultivation provided he means to settle down as a practical farmer on a small or large scale. Others should be absorbed in one or the other public services. If the annuity a zemindar gets is equal to or is higher than the emoluments of the public post to which he is assigned then he should get no remuneration for his services. If, however, the annuity falls short of the emoluments of the post he is appointed to then he should receive only the difference between the emoluments of the post and the amount of his annuity from the State.

As regards the cultivators who are likely to-be set free from agriculture firstly, Government should adopt a heavy programme of public works such as roads, canals, drainage and land-reclamation schemes in the Province and for such schemes which are likely to be productive borrowing should be resorted to. We have 99 lakh acres of ravine and Usar land and marshy lands in the Tarai in the United Provinces which could and should be reclaimed. Labour power set free from the villages could first be employed on the reclamation of these lands, and then helped to settle down in newly established villages as cultivators, artisans and so on. Again we have 102 lakh acres of land which at present are lying waste though culturable which could and should be developed either as fruit-yielding groves or grass-yielding common or brought under the plough. Some persons could be settled on these.

Secondly, Government should adopt a definite and intensive policy of developing those industries of the Province for which

raw materials are available. Here again a definite policy of borrowing on a large scale for investment in industries should be adopted. We have already developed the sugar industry. What it needs is further application of science and organisation so that cost of production may be further brought down. Our glass industry is still backward, and there is a great scope for the development of oil milling, and for the further extension of textiles, leather and so forth. In the mountains of the north alone, a number of industries deriving their power from hydro-electricity and their raw materials from the forest and mountain produce could be developed.

If the Government proceed with the scheme roughly outlined above with determination then within the space of a generation the United Provinces would begin to hum with activity and the problem of educated and uneducated unemployment would have solved itself.

As it is the scheme is a mere outline, a string of ideas. Its central point is that if the zemindari system is abolished a goodly sum which now goes to the pockets of a parisitic class would be released for utilisation on the development of the country. Is this idea correct? Let us examine relevant facts and figures. At present in the United Provinces total arable area is roughly 386 lakh acres (1934). From this on an average the Government receive about 7 crores of rupees as Land Revenue. As land revenue in the United Provinces is about 40 per cent of the net assets of landlords, therefore we will not be for wrong if we assume that on an average the landlords in this Province receive something like 18 crores of rupees in rents annually. If 60 per cent of this will be taken away by the Provincial Government as land revenue and for the payment of annuities to the dispossessed zemindars 40 per cent would be left over to be shared amongst the Panchayats and the District Boards, that is, roughly speaking, a sum of about rupees seven crores per annum would be available for expenditure on local services. At present the income of the District Boards from the land cess in the Provinces is about Rs. 75 lacs, and their total income from all sources excluding Government grant of about Rs. 90 lacs, is about Rs. 1,10 lacs. So that if half and half of the available 7 crores are divided between the District Boards and the village Panchayats the Boards will have about Rs. 3½ crores per annum from land cess alone, *i.e.*, more than four times their present income from the same source. Even if the existing rents are decreased on an average say by 33 per cent then total income from rents that the Panchayats are likely to receive in the

immediate future would be about 14 crores of rupees per annum. After paying 60 per cent of this to the Provincial Government a sum of about 2 crores 40 lacs would be left with the Panchayats and this if it is equally shared by them and the District Boards would place at the disposal of District Boards a sum of one crore and 20 lacs of rupees.

Another basic assumption underlying the above scheme, and for the matter of that any scheme of economic development in the Province, is that a deliberate policy should be adopted of regulating the increase of population. We must restrict our numbers otherwise all our efforts in the direction of increasing production would fail to make the lot of the people better. The other day Dr. Sam Higginbottom announced an epoch-making discovery of his with his usual gusto that standard of living of the people could only be raised if production per labourer would be raised and not per acre only. Whether it was something new or just an ABC of Economics we need not stop to consider, but we must acknowledge with gratitude the fact of Dr. Higginbottom having stated in his own unimitable style the truth that prosperity or otherwise depended upon the relationship between output of wealth and the number amongst whom that wealth was to be shared. If the sharers continued to increase *ad infinitum* no amount of production per unit of land would increase the wealth available per capita. If the wealth per capita was to be increased production per unit of land must be increased and number of sharers in that production must at least be kept constant or definitely reduced.

I may at this stage take into consideration the scheme of rural development adopted by the Provincial Government and published in the papers. It is an admirable scheme in so far as it seeks to resuscitate rural life through the organisation of village Panchayats. But its weak points are (1) the absence of adequate financial resources at the disposal of local agencies, (2) failure to conceive that rural development cannot be brought about without simultaneously tackling the problem of industrial development, (3) the niggardly remuneration that it has provided for the officers of various grades, (4) undue reliance on voluntary civic service and (5) failure to utilise the existing District Boards as agencies for rural development and instead setting up a new district organisation.

The scheme is conceived in a niggardly spirit and is calculated to maintain an ascetic standard of living for the people even for the future. Imagine a district organiser getting Rs. 50 per month entrusted with the work of touring about the

whole district. Even if he has no family to support the sum can hardly suffice for his conveyance charges and the khaddar clothes, assuming that while going about he would board and lodge with the people for whose economic betterment he would be devoting his life. The drive would certainly create discontent amongst the rural masses which though it is not likely to be " divine " whatever the term divine may mean in this connection would surely be human, that is, make people long for better things of life. But whether a divine agency imbued with the spirit of self-sacrifice and service would be forthcoming to create means for allaying the discontent raised is more than doubtful.

Whether rural reconstruction is achieved or not the Congress Government of to-day will have created an organisation entirely manned by Congressmen and spread over the whole Province which would serve them well at the time of next election. Whereas the candidates of other parties will have to spend money on electioneering out of their own pockets or out of their party funds, the Congress elections in future would be fought out of the public funds. Not a small gain this!

While discussing this scheme in the Economics Conversazione it was pointed out to me that the Panchayat is likely to be a failure due to (1) lack of capacity in the village people for carrying on the work entrusted to them and (2) prevalence of corruption amongst the Panchayat members. My conception of an average villager is that he is shrewd enough to understand his own interest and there would be and should be in the beginning capable men to guide him, and to see that no serious irregularity or injustice is done. Even after the Panchayats have been trained and by the spread of education average villager has become more capable the Provincial Government will have to maintain some agency to periodically inspect the Panchayats to see that a certain standard of efficiency is maintained in the various services placed under the charge of the Panchayats. In England the Central Government prescribes the general standard of pay, uniform, and efficiency for the local police and unless this is attained the Government grant-in-aid is not forthcoming. We shall have to adopt some such effective method of supervision from the centre to see that the services are performed with efficiency and effectively.

The fear of corruption amongst the members of the Panchayats, I am not inclined to take seriously. In a small community where election of the members of the Panchayat would take place periodically there is not much room for corruption. And with every increase of education and general

prosperity of the people the degree of corruption and its incidence would go on diminishing. Responsibility is a great force in both teaching people how to do things and to a certain extent in making them go straight. The idea of some that first people must be given a series of lectures on how to work and how to be honest then they should be entrusted with the administration of Panchayats, though plausible in an academic way is to my mind utterly useless from a practical point of view. Entrust the people with work and responsibility and take all the imaginable and necessary steps to guide them and to keep them straight, that alone would help us in getting things done. Maybe in the beginning there may be some failures, some cases of corruption. These should be properly and promptly dealt with, but the scheme should be continued uninterrupted. This policy alone would lead to success.

Again it was pointed out to me that reclamation of available land would not be able to provide occupation for all persons who are likely to be relieved from the existing villages if my scheme of creating economic holdings of the standard recommended in the paper is to be created. I entirely agree. But I never recommend that the whole thing should be put into practice at once and an army of workless and homeless people let loose on the roads. What I recommend must be our ideal and we should proceed gradually towards that ideal. To the extent that men are absorbed in reclamation work or are settled down in newly established villages or in newly developed industries, the holdings should be enlarged and to that extent alone the existing cultivators should be dispossessed. No one should be made to give up his land unless another; at least, equally remunerative work is made available for him elsewhere.

Another serious drawback pointed out in the scheme outlined by me was that it is likely to create dissatisfaction not only amongst the landlords but also amongst the cultivators who will lose the existing hereditary rights. This I must confess is likely to be the result and the Congress Government whose main strength lies in the masses should be the last to take the risk of unpopularity. They may, therefore, as has already been recommended by the Agrarian Committee, begin by conferring hereditary occupancy right with limited power of mortgaging on the cultivators. As some adults of a family move on elsewhere either to be settled permanently in a newly established village or in a newly developed industry they may be made to forego their claim on the family prosperity. In this way the thing may be worked gradually towards the ideal.

Another interesting problem connected with rural development in these Provinces is that of indebtedness. Both the zemindars and the cultivators are heavily in debt. The methods so far adopted by the Provincial Government, though well-meant, have certainly succeeded in restricting rural credit. This is by no means desirable. Agriculture is a business and must always be run on business lines and it is difficult to imagine that agriculture in India in future would need no credit. By our debt legislation and certain other acts we have already succeeded in creating amongst the debtor classes a strong inclination to evade their obligations and a strong fear in the minds of the creditor classes that investment in agriculture is not safe. This sort of thing might for the moment win cheap popularity for the Congress leaders and might make the agriculturists jubilant but in the long run it would mean their undoing, therefore we must not do anything that would put unnecessary restrictions on the credit facilities of the agricultural classes. By all means let us try to make credit cheap and safe. But it is not by such heroics as have been adopted thus far that the problem of rural indebtedness is likely to be solved. So long as the margin between the income and expenditure of the agriculturists is minus they must remain indebted and the indebtedness must continue to be unproductive in the main. Real and permanent solution of this problem lies in making the margin plus.

But what about the existing debts? Taking the zemindars first: A special judge should be appointed for each district and all creditors of the zemindars of the district should be required to submit their claims to the judge within a specified time. No claim after the expiry of the appointed date should be admissible. After receiving the claims and satisfying himself that they are genuine, the judge should determine the proper amount that in his opinion the debtor should be considered liable to pay. Herein he should not allow interest more than at the rate of say 6 per cent per annum and should in no case allow more than twice the sum originally advanced. Having determined the total indebtedness of a particular zemindar he should give possession on a proportionate property of the landlord to the decree-holder, and after that the land should be resumed by the state for the village communities according to the principles laid down in the first part of this paper. This would do away completely with the indebtedness of the zemindars. As regards the debts of the cultivators, more or less the same procedure should be adopted as in the case of the zemindars in determining the total indebtedness of each individual cultivator. The

rate of interest to be allowed in this case should not be more than 12 per cent and in no case should the total debt be allowed to exceed double the amount originally advanced. All the debts of the individual cultivators should be taken over by the village Panchayat and the creditors in future should receive interest at the rate of 6 per cent from the Panchayats till the money is paid back. While the cultivators as members of the Panchayat should continue to deal with the Panchayat as their creditor on the existing Co-operative Credit Society basis, they should be debarred from borrowing from anyone else except the Panchayat by declaring that debts advanced to them, if not repaid by them, will not be recoverable by any process of law, and neither their property nor their crops would be liable to debts other than those of the Panchayats.

This would appreciably reduce the burden of existing debts and would at once and for all time to come free the cultivators from the clutches of the Sowcar and the Mahajan. The idea of entrusting the village Panchayat with co-operative credit and other co-operative activities such as co-operative purchase or co-operative sale, etc., may appear to be fantastic to some. For their information I may be permitted to say that such things were actually done by village Panchayats in India long before the modern co-operative movement was developed in Europe and then imported into this country.

THE STORY OF THE I.L.O.: AIMS, METHODS OF WORK AND RESULTS ACHIEVED (*Contributed*)

The International Labour Organization is a self-governing branch of the League of Nations. Any State that joins the League automatically becomes a Member of the I.L.O. But a State may join the I.L.O. without becoming a member of the League, or may withdraw from the League and still retain its membership in the I.L.O. Thus, the United States is a member of the I.L.O., though not of the League, while Brazil and Japan have left the League, but remain in the I.L.O.

Objects of the I.L.O.: The I.L.O., like the League, was set up under the Treaty of Versailles. The aim of its founders was the establishment of universal peace based upon social justice. What they had in mind was not the creation of a super-State, but rather of an Association of States, which, through systematic procedure, could enable its Members to better labour conditions by international agreement. Consequently, they specified in the Charter, examples of improvements they deemed to be urgently required. These were:

> "The regulation of the hours of work, including the establishment of a maximum working day and week, the regulation of labour supply, the prevention of unemployment, the provision of an adequate living wage, the protection of the worker against sickness, disease and injury arising out of his employment, the protection of children, young persons and women, provision for old age and injury, protection of the interests of workers when employed in countries other than their own, recognition of the principle of freedom of association, the organization of vocational and technical education and other measures."

Guiding Principles: They also stipulated nine methods and principles for regulating labour conditions. Though some of these, as for instance, the 48-hour week, have since been attained and even surpassed, at that time (1919) all were regarded

as of " special and urgent importance." The nine methods and principles were:

(1) The guiding principle that labour should not be regarded merely as a commodity or article of commerce.

(2) The right of association for all lawful purposes by the employed as well as by the employers.

(3) The payment to the employed of a wage adequate to maintain a reasonable standard of life as this is understood in their time and country.

(4) The adoption of an 8-hour day or a 48-hour week as the standard to be aimed at where it has not already been attained.

(5) The adoption of a weekly rest of at least 24 hours, which should include Sunday wherever practicable.

(6) The abolition of child labour and the imposition of such limitations on the labour of young persons as shall permit the continuation of their education and assure their proper physical development.

(7) The principle that men and women should receive equal remuneration for work of equal value.

(8) The standard set by law in each country with respect to the conditions of labour should have due regard to the equitable economic treatment of all workers lawfully resident therein.

(9) Each State should make provision for a system of inspection, in which women should take part, in order to ensure the enforcement of the laws and regulations for the protection of the employed.

A Non-Political Organisation: The policy of the I.L.O. is strictly non-political and economically non-partisan, as is ensured by its form of organization. Only a State can be a member, but, under its Constitution, the representatives of a State include employers' and workers' delegates. Today, its membership of 62 States includes every important industrial country except Germany.

Machinery of the I.L.O.: The machinery of the I.L.O. comprises three parts: (1) The International Labour Conference; (2) the International Labour Office; and (3) the Governing Body.

The International Labour Conference: The Conference, which may best be described as a "world labour parliament," meets at least once a year. Usually, the meeting is held in June in Geneva; but special conferences, as for instance, the maritime sessions to discuss matters pertaining only to seamen, are sometimes held in interim. Each Member State is required to send four delegates to the Conference, two representing the Government, and one each the employers and workers. The employers' and workers' delegates are appointed by the Government on the nomination of the most representative employers' and workers' organizations.

The chief functions of the Conference are: (1) To consider and discuss the annual report of the Director of the International Labour Office. This report is a survey, from the international standpoint, of the social tendencies of the world and its component parts. (2) To consider specific questions relating to labour conditions, with a view to drawing up international agreements. (3) To receive the reports made annually by Member States on the way they are applying agreements made at previous sessions to which they are parties.

The International Labour Office: The International Labour Office is the permanent secretariat of the I.L.O. It is housed in Geneva in a building specially erected for it on a site given by the Swiss Government and the municipal authorities. At the head of the Office is the Director, who appoints the staff now comprising about 450 persons of more than 40 nationalities. The present Director is Harold B. Butler, an Englishman.

The principal duties of the Office are: (1) to prepare the ground for the Conference by collecting, collating and analysing all the available data on questions with which the Conference is to deal; (2) to carry out the secretarial work of the Conference; (3) to follow up the decisions of the Conference and generally to act as the nerve-centre of the organization; (4) to collect and distribute information on all matters relating to the international adjustment of conditions of industrial life and labour; in other words, to act as a fact-finding agency and to make the results of its researches available to the world by publications and correspondence.

It may be pointed out here that in response to repeated demands made by delegations of Indian employers and workers at successive sessions of the I.L. Conference, an Indian Branch of the I.L.O. was opened at New Delhi in 1928.

The Governing Body: The Governing Body of the I.L.O. is a joint body of Government, employers', and workers' delegates. It appoints the Director, controls the Office, and determines its work and expenditure. The Governing Body also decides what shall be the agenda of the annual Conference. Thirty-two members, who hold office for three years, comprise the Governing Body. These are divided as follows:

(1) Sixteen Government members, eight of whom are appointed by the States of " chief industrial importance " (India is ranked as one of the eight States of " chief industrial importance "), and eight by the Government delegates of the other States at the Session of the Conference at which the triennial election is held. (2) Eight members representing employers, elected by the employers' delegates to the Conference. (3) Eight members representing workers, elected by the workers' delegates to the Conference. Six of the Government members, two of the employers' representatives, and two of the workers' representatives must come from non-European counries.

Nature of Labour Conventions: The machinery of the I.L.O. was designed for two purposes—the " legislative " business of drawing up international labour agreements, and the collection and distribution of information about labour conditions. The two purposes are closely linked; to a large extent the drawing up of agreements is impossible unless the information has already been collected. The agreements, however, are not " legislative " in the usual sense of the word. The delegates at the Conference reach certain conclusions, but those findings do not automatically bind the States which sent the delegates. The national authorities are obliged, by Treaty, to consider the findings, but they are free to reject or to adopt them. They have to take their own decision; if they decide to accept them and to bind themselves to observe the findings of the Conference, then they make themselves responsible to the world for seeing that within their territories the findings are carried out. In some cases this result is reached without a Convention being ratified by a State. In a sense, then, the object of the International Labour Organization is to promote national legislation.

Conventions and Ratifications: To date, over 60 Conventions dealing with such subjects as hours of work, minimum wage, child labour, vacations with pay, workmen's compensation, unemployment compensation and social insurance of different kinds have been adopted by the Conference. During the last three years these treaties have been ratified at a rate of about 50

annually. Countries accepting such Conventions are, of course, free to adhere to or establish higher standards within their own boundaries. In fact, the existence of a common minimum standard protects higher labour standards in any country by tending to equalize production costs as between enterprises competing in the same international markets. In addition, nearly 60 recommendations, supplementing and enlarging the treaties, have been adopted by the Conference.

Colonial Labour Problems: Forced Labour: The International Labour Conference has also dealt with colonial labour problems. In this connection reference should be made to the Forced Labour Convention and the Recruiting of Indigenous Workers Convention. The Forced Labour Convention was adopted in 1930 and provides for the progressive abolition of forced or compulsory labour, its immediate prohibition for private purposes and its strict regulation for Government purposes. France, Great Britain and the Netherlands are among the Colonial Powers which have ratified the Convention. The Government of India has not ratified but has taken steps to secure the application of its principal provisions.

Recruiting of Indigenous Workers: The Recruiting of Indigenous Workers Convention was adopted in 1936. It provides for the close regulation of the various methods used for obtaining indigenous labour for employment on mines, plantations, etc. The ratification of this Convention is now under consideration by the Powers chiefly concerned. In 1938 the Conference will advance a further stage in the regulation of the conditions of employment of indigenous workers by considering proposals for the preparation of a Convention on contracts of employment. It is anticipated that a Convention will finally be adopted in 1939 and will cover the Government supervision of contracts of employment, the maximum initial length of such contracts and penal sanctions.

A Centre of Intensive Research: One of the principal functions of the I.L.O., as has already been pointed out, is that of collecting and distributing information on conditions of industrial life and labour. All the year round the Office in Geneva is gathering up, comparing, and epitomizing the facts about labour law and conditions of employment throughout the world. Governments, employers' associations, trade unions, and other organizations have learned to call upon the Office for information on questions relating to labour and industry. The

Library of the Office is the most complete of its kind in the world. Its catalogue includes about 400,000 items in more than 30 languages, and the weekly average of accessions amounts to 600. In addition, nearly 4,000 periodicals from more than 100 countries and in some 45 languages are received by the Office.

I.L.O. Publications: The unrivalled resources of the Office are placed at the disposal of the world chiefly by means of its own publications. These include a weekly paper, a monthly review, texts and translations of new laws relating to labour, a yearbook, and a number of non-periodical works embodying the results of special investigations or of the day-to-day research work of the Office.

An International Labour Code: There are many reasons why the activities of the I.L.O. should be made widely known to the public. One reason is that the task of framing international labour laws is one of urgent necessity. The world, in an economic sense, is rapidly becoming a single undivided area of exploitation while it remains still divided politically. The I.L.O. is addressing itself to the problem of unifying industrial legislation in accordance with economic facts. The international code is taking definite shape. It must be expanded and developed steadily and consistently.

PROFIT SHARING—AN INDIAN PLAN

BY

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Students of the labour movement know that King Capital and King Labour have always fought, are fighting now, and will continue to fight for a long time to come. Both of them, according to one writer, bear scars too deep to be readily forgotten. When the factory industry began, industrialists looked upon the members of the working force " as commodities to be bought and sold or as machinery to be tested, measured, and adjusted for efficiency." Long hours of work, a reckless disregard for the health and comfort of the workers, and ruthless frustration of attempts to remove the causes of these conditions have hardened labour to such an extent that " the spirit of labour is one of strife and not one of peace."

Employers and employees each wish as large a share as possible of the product of the industry. Production for profit according to the latter is " immoral, undemocratic and degrading " to the workers as it puts gain to the individual before good to the community. The former deny the right of labour to claim anything more than the wages which are paid to it for serving Capital. Mr. Bowie, in his book, *Profit Sharing with Employees,* gives us a sample of how crudely a capitalist can argue, when labour questions his right to take more than a proper share of the profits earned by his undertaking:—

" I invest my capital in a business and run the risk of losing it. For this risk, I am entitled to whatever recompense my spirit of enterprise may bring me. I pay good wages to men and women, who might otherwise have no work at all. I do not compel them to work for me. They are eager to earn them, and when they have earned them I do my whole duty by paying them. Why should I admit that those, whom my enterprise has helped to live, should have any claim upon it or me when I have fulfilled the terms of my bargain with them? "

This is crude reasoning but it must be realized that Capitalists should be amply rewarded for the risks they take. This reward cannot be limited without injuring the whole industrial structure. It will be silly for us to think that there are no sharp antagonisms

between employer and employee. Throughout the ages, there has been a great deal of discussion regarding the question of adjusting the relationship between those who help Capital by their labour or by their brains and those who own the capital. Mr. C. E. Knoeppel declares that the following statements are true so far as employers and employees are concerned[1]:—

(*a*) Instead of being mutual, their interests are absolutely antagonistic.

(*b*) As factors in our industrial life they are irreconcilable.

(*c*) They can merge as easily as oil and water can be mixed.

(*d*) They have every reason for staying apart.

(*e*) They are two " armed camps " waging warfare, first one side winning and then the other.

In spite of these statements, both Mr. Knoeppel and Captains of industry, like Sir Nowroji Saklatvala, have not given up hopes of reconciling the differences between capital and labour. Social peace can be obtained only when frankness and fairness characterize the dealings between employers and employees. It must be recognized, at the outset, that the antagonisms which separate capital and labour, cannot be removed—they can only be adjusted. Amongst the great crop of palliatives, for assuaging the differences, is profit sharing. This scheme has been introduced by certain socially minded employers for the sake of reducing industrial troubles. In several cases, however, profit-sharing schemes, have been coloured by the " mixed motive," *i.e.*, employers do not desire to divide profits as a matter of justice, irrespective altogether of hopes of increased efficiency. The high mortality of profit-sharing schemes has been due to the fact that the framers have expected harder and more concentrated work from the employees. Others again have introduced the scheme simply because of its immense advertising value.

" The essential feature of profit sharing is that the employees' earnings are not definitely fixed, and that the basis upon which they vary is net profits—as distinguished from output, total sales, or any other factor."[2] Owners of capital receive their quota, and the proposal under profit sharing is that the workers by hand or by brain should also receive a share. A

1 " Management Engineering."

2 A. W. Burritt and others—"Profit Sharing."

cash payment may be made at the end of a specified period usually the fiscal year, or the bonus may be credited to a provident fund account, the amount to be withdrawn only in cases of emergency. This is done with a view to encourage thrift, and if the words of housewives carry any weight, the scheme should be generally adopted as workers on bonus day generally return home drunk! A third form of profit sharing is to be found in the practice of giving shares of the company in lieu of a cash bonus. But a definite scheme must be given to the employees. A plan that reads " Out of the net profits of the business for the said fiscal year, beginning February 1, 1937, remaining after deducting all costs and expenses incident to the said business, including payment of wages as shown by said payroll, there shall be set aside such sum as the Board of Directors may determine to be a fair return upon capital invested, and that out of the balance remaining one-half of it shall be distributed among such employees as may be deemed worthy by the Board of Directors " will not be successful because the management decide to grant a certain portion of the profits for distribution to the employees, after and not before the extra exertion which comes in the wake of a profit-sharing plan. No man in his senses can expect an employee to increase profits and keep down costs, when he has no idea as to what portion of the profits he will receive.

That Indian industrialists have taken a lesson from the results of Western experiments, is evident when one goes through the notices issued by the Board of Directors of the Tata Iron and Steel Company, Ltd., to their employees.[3] In each of the last three years the company has given a special bonus to every employee at the same time as it has paid dividends to its shareholders. Sir Nowroji Saklatvala and his colleagues, desiring to institute a method of associating the employees of the company more definitely with its prosperity in good times, have now introduced a profit-sharing plan. The scheme provides that when the amount to be paid to the shareholders as dividend exceeds Rs. 100 lakhs, each employee shall receive half a month's pay as profit-sharing bonus for every Rs. 25 lakhs (or part thereof) paid as shareholders' dividend in excess of Rs. 100 lakhs. Thus

[3] Two notices were issued to the employees of the Tata Iron and Steel Co., Ltd, the first on the 27th April and the second on the 31st May 1937. The General Manager was kind enough to send me copies of these notices in response to my request for details regarding the Profit sharing Scheme.

When the extra dividend above Rs. 100 lakhs is			Each employee will receive as bonus
Rs. lakhs		Rs. lakhs	
	not over	25 „	½ Month's pay
Over 25	„	50 „	1 Month's pay
„ 50	„	75 „	1½ „
„ 75	„	100 „	2 „
„ 100	„	125 „	2½ „

and so on. If the share capital of the company were altered the bonus scale would also be revised. Formerly the bonus was paid in a lump sum but now the management have decided that it should be paid as follows:—

Total bonus payable		When paid
½ Month's pay	...	Single payment on dividend date
1 „ „	...	Half on dividend date Half 3 months after dividend date
1½ „ „	...	Third on dividend date „ 3 months after dividend date „ 6 months after dividend date
2 Months' pay or over	...	Quarter on dividend date „ 3 months after dividend date „ 6 months after dividend date „ 9 months after dividend date

Again, the management of the company have formulated a scheme whereby employees receiving salaries of Rs. 500 per month or over do not receive a cash share of the profits but the bonus earned will be invested in shares of the company by Trustees acting on behalf of the employees. The shares will remain in the hands of the Trustees until the service terminates when they will be transferred to him or sold on his behalf. The management have recognized that only the upper class of their employees should be given their share of profits in the shape of shares. But it remains doubtful whether this form of profit-sharing is fair to the employees. When a person decides to invest his surplus cash, he tries to spread his risks. In this case the money is invested in the shares of only one company. His

efficiency will not be impaired as long as the shares are rising in price and pay dividends but it will certainly affect the loyalty of the employee in case the shares decline and the business passes through bad times.

The employees of the Tata Iron and Steel Company, Ltd., have now been given a definite scheme, and they know beforehand what share of profits they will obtain and how it will be paid. The amount of bonus according to a notice issued by the General Manager of the company for the year 1936-37 is equal to 1½ months' pay as the extra dividend over Rs. 100 lakhs paid as shareholders' dividend was Rs. 62 lakhs. This bonus will be paid in three instalments, *i.e.*, the first on or about the 14th June, the 2nd on or about the 14th September and the third on or about the 14th December 1937.

In profit-sharing schemes the usual condition of participation is a minimum length of service. Generally speaking, employers do not insert conditions favourable or unfavourable to Trade Unions. Dr. Lokanadhan, in his book, *Industrial Welfare in India*, tells us, however, that in the scheme instituted by the Birla Cotton Spinning and Weaving Mills, Ltd., Delhi, anyone taking part in a strike against the management forfeited his right to a share in the profits. In some firms the management reserve to themselves the right to debar any worker from participation in the profits. Again, in other firms, employees are not entitled to share in the profits unless they "are living clean, sober and industrious lives, and taking care of their wives and families." This is paternalism carried to a very fine point and involves a great deal of supervision to ensure compliance of these requirements. Some companies in America allow only such of the persons whose efficiency and loyalty have contributed to the growth of the business, to participate in profit-sharing schemes. Needless to say, they have not been successful, as efficiency and loyalty being intangibles, cannot be measured. In the Tata plan very liberal conditions have been given to the employees. The distribution is on an individual basis according to wages or salary received. Para 8 of the notice issued on the 27th April, 1937 by Mr. J. L. Keenan, the General Manager of Tata's, reads as follows:—

> "Those employees will be entitled to the profit-sharing bonus who have been in the continuous employment of the company throughout the company's official year to which it applies. If the employee's service has terminated between the end of the year and the

first payment date, he (or in the case of a deceased employee, the person or persons entitled to it) may claim payment of the full bonus amount on that date."

On the whole, the scheme instituted by Tata's is very commendable; it is free from the odour of charity and places the whole plan on a businesslike basis. Industrial Psychologists will tell us that employees resent being treated as " pampered pets, always to be smiled at and cared for." The fact that the terms of participation have been clearly outlined before the operation of the scheme, will go a long way in eliminating friction. Further, one is struck by the simple language in which the plan has been clothed, and there is no doubt that the potential beneficiaries, with their meagre knowledge of finance will become thoroughly familiar with it.

It will be well to remember that the scheme has many limitations. Most of our labour troubles are due to the weakness of the wages system. A wage-earner works primarily for wages, and he is not interested in the product which he is engaged in making. He is always trying to devise ways and means of inducing his employer to give him a higher wage. The idea in profit-sharing schemes is to interest the employee in increasing the profits of the business. " The employer of course is already interested and thus the two interests will draw together and converge."[4] But the devotees of profit-sharing have always recognized the necessity of paying full market wages. Many employers use profit-sharing schemes for lowering wages. Naturally the employees look upon such schemes with suspicion and distrust. Organized labour at the present time is resentful of even " welfare work " feeling sure that the management is trying to put something over them, and that it is just another case of " not letting the right hand know what the left hand is doing."

Further, plans like the one introduced by Tata's, will be successful only when profits are both large and regular. Employees begin to look upon their bonus as a right, and when the company passes through bad times, industrial unrest will necessarily result. Realizing that the shares are not only small but that the gap between effort and reward is too wide, employers have instituted schemes which remove this fundamental difficulty. If the Steel Company had arranged for quarterly or even semi-annual disbursements, instead of paying the bonus at the end of

[4] E. E. Cummins—The Labour Problem in the United States.

the fiscal year, greater efficiency and loyalty to the firm would have resulted.

These are not the only limitations that the management have to consider. It must be noted that in former times labour obtained only what or a portion of what it fought for. Now-a-days employers take the initiative in the establishment of the schemes which bring with them higher wages. Labour is naturally surprised and attributes these proposals to "the traditional self-interested motives of employers." In the eyes of the employees, profit-sharing is a "scion of an immoral house." A great deal could therefore have been done if the co-operation of the employees had been invited in the institution of the plan. Unless a "Square deal" system of industrial relations is built up, the scheme will invite the criticism of organized labour which regards profit-sharing as another "shaft in the employers' anti-union quiver."

The obstacles outlined above can certainly be overcome, but according to Prof. Cummins there is a more fundamental difficulty. "In the average industrial enterprise of to-day there is a very flimsy and uncertain connection between the individual employee's efforts and the good or bad fortunes of the business. The connection is present, but there are too many other factors crowded into the situation to leave it more than standing room. Compared with the responsibility of the management and with the effect of general market conditions the contribution of the individual employee is very, very small, and he knows it. He has discovered by experience that the amount of the profits he receives bears no direct relation to his own diligence, and he has learned to regard the yearly payment as a matter of luck, as a gift from the gods, rather than as a payment for service rendered. Hence as a method of eliminating industrial friction in any fundamental way, profit sharing must probably be regarded as inadequate to say the least."

Albeit, given the proper atmosphere and leaders of the type of Sir Nowroji Saklatvala, such schemes will make some contribution, however modest it may be, towards efficiency and social peace.

REVIEWS OF BOOKS

THE THEORY OF EMPLOYMENT by Dr. B. V. Narayanaswami Naidu. Essays in the Theory of Employment by Joan Robinson—A Review —Macmillan & Co., Ltd. Pp. 255. Price 8s 6d. 1937.

No student of Economics needs to be reminded of Keynes' *General Theory of Employment, Interest and Money.* In a collection of papers Mrs. Joan Robinson seeks to apply Keynes's General Theory to a number of problems of current interest; and thus makes an able commentary on Keynes' *General Theory.* Mrs. Robinson's book, therefore, presupposes a clear knowledge of Keynes' terminology and a thorough grasp of the implications of his general theory. The four parts into which the book is divided appeal to a variety of interests ranging from the erudite *pandit* of Economics to the lounging general reader. While Part III stands as a formidable example of the heights to which abstract analysis and higher mathematics can soar and the way in which they can cloud the vital economic issues from the naked eye of the average reader, Part IV is full of pep and force and reads so much like a novel that the reader is more than amply rewarded for the pains he took in threading through the highly formalised system of treatment in the previous parts. A book of such varied appeal deserves careful study. It has, however, to be pointed out that the author relegates to footnotes important statements which could with advantage be developed into separate theses.

Part I consists of four essays. The first essay is on 'Full Employment.' The author raises the question why the Trade Unions demand higher money wages. Mr. Keynes answers that the Trade Unions are concerned with relative real wages while the Pigovian School asseverates that the Trade Unions always think too much in terms of money. The connection between movements in money wages and movements in real wages is largely accidental. It is generally admitted that it is the movements of the level of employment which chiefly influence the movements in the level of money wages. In any given conditions of the labour market there is a certain more or less definite level of employment at which money wages will rise, and a lower level of employment at which money wages fall. Mr. Keynes' psychological interpretation of full employment in terms of the level of real wages is found unsatisfactory. According to the author "the real point of full employment is the point at which every impediment on the side of labour to a rise in money wages finally gives way," and the conditions of full employment obtain only when no one employer can increase his staff without reducing the staff of some other employer. What, then, is the mechanism which prevents the capitalistic economic system from overshooting the point of full employment? It lies in the expectations of entrepreneurs as to the future course of money wages and the effect of a given change in money wages upon future prices. Such expectations lead to inflation. The point of full employment is not, therefore, an equilibrium resting place, but a precipice over which once it had reached the edge, the value of money must plunge into a bottomless abyss. The rope which holds the

value of money is a limitation on its supply. There are safeguards, legal and monetary, which prevent such an inflation usually. The prevention of the attainment of full employment is the first duty of banking authorities as laid down by law, tradition and sentiment. This being granted, what is the ideal policy to be pursued? One way is to maintain a high level of employment. If a single country is to pursue this in isolation there should be a high degree of control over foreign lending. A second method—perhaps more commonly resorted to—is the securing of stability of exchanges. This too presupposes a level of unemployment sufficiently high to prevent money wages from rising. A third policy is the maintenance of the stability of the price level. This too has the defect that stable prices do not necessarily ensure a stable level of employment; nor is the latter desirable. Fourth and last is the policy of promoting the best interests of wage-earners. The difficulty in the way of this policy is that there are groups and groups of workers and what is designed to create employment for one may affect the real wages of another. Hence it would be reasonable to aim at a level of employment just short of the point at which a sharp fall in real wages sets in. This will be an optimum level with all the characteristics of full employment and its attainment requires a control of policy shared between the trade unions and the monetary authorities. But trade union policy is only very loosely co-ordinated and there is no single unified decision for "labour as a whole."

The next essay is on "Mobility of Labour." How far is unemployment due to immobility of labour? Immobility of labour has little importance as a factor separate from low effective demand; they act and react on each other. Immobility may obstruct the influences which cause effective demand to expand by allowing monopoly profits to increase, by causing the general level of money wages to rise, or by causing a relative rise in wages in the capital-goods industries. The unemployment thus resulting is caused by immobility only in a certain sense. But it is impossible to distinguish the part of unemployment that can be directly attributed to immobility alone. Nor does the degree of mobility affect the probability that any given changes in relative demand will reduce unemployment. From changes in the relative demands of different industries, the author does not consider the effects of a change in the relative prosperity of different parts of the same country. She applies Mr. Keynes' point of view that an increase in thriftiness will not in general tend to increase the rate at which capital is accumulated to cases of frictional employment also and endorses his views.

A theoretical examination of four proposed remedies for unemployment is made in the next essay. Firstly, compulsory reduction of hours. This is not in any sense a remedy for a low level of employment. It merely leads to a redistribution of a smaller total of employment amongst a larger number of individuals. As regards the second remedy of raising the school-leaving age, the author comes to the conclusion, "those who place a higher value upon the advantages of education than does the general run of public opinion, might take the opportunity of a high level of unemployment to introduce a reform which will persist into a period of high employment." But it is only a method of mitigating the evil effects of a low level of employment and not one of eradicating the cause.

The next remedy is a scheme of emigration. A constant stream of emigration will impose a constant check upon the rate of investment and its effect in reducing employment is likely to be the most serious of any schemes. The fourth proposed remedy is a scheme of subsidy to wages in various forms. If it takes the forms of each entrepreneur being paid by the State a certain proportion of the wage received by each man in his employ, the sums required being recovered out of additional income-tax, then it has the same effect as of taxing the rich for the benefit of the poor resulting in an increase in employment. But the other form of dole received by a man when he is out of work being paid to his employer when he is given a job, is rather "fantastic" and it would lead to the fantastic result of a larger total of output being produced by a less efficient selection of firms.

The conception of disguised unemployment is a very interesting subject and is the theme of the next essay. Disguised unemployment is something similar to what in our country we call "under-employment." An illustration of it is the adoption of inferior occupations by dismissed workers. Its existence introduces a complication into the formal scheme of the General Theory. In disguised unemployment there is an increase in output unaccompanied by an increase in saving. In this connection the following statement of the author is of great value. "The attitude of mind, prevalent even now in certain quarters that unemployment is the result of a vicious idleness of disposition in the unemployed individuals, pandered to by the dole, is largely an anachronism which had some plausibility in an epoch when there was open access to land, so that any active and laborious individual could make a livelihood, when he fell out of employment, not glaringly different from what he had obtained in his former trade." The effects of disguised unemployment on the dole system are next considered. Provided he does not sacrifice his right to the dole, an unemployed man does himself good, and on balance does others no harm, by occupying himself as usefully as he can. But the regulations surrounding the receipt of a dole in England are such that they militate strongly against engaging in useful occupation and the economic effects of such regulations are no doubt harmful.

Keynes developed his General Theory of Employment only in terms of short period. Here, in Part II, the author carries on the analysis to the region of long-period concept also. While the importance of the subject is not merely academic, it is treated in a highly formalised and mathematical manner. This analysis of long-period equilibrium is, indeed, not a prediction of the course of history. But at the same time it serves to show that long-period influences are of the utmost importance at any moment of time; for in actual situations long-period tendencies show themselves in statistics concurrently with short-period effects.

The effect of changes in the rate of interest upon equilibrium conditions is considered. As against Prof. Cassel who maintains that a sufficient reduction in the rate of interest will increase employment, the author contends that the equilibrium level of total output and employment will tend to be raised or lowered by a fall in the rate of interest, according as the direct effect of the fall in interest upon the desire of individuals to save is negative or positive and according as the elasticity of substitution between labour and capital is less or greater than

unity. She thinks that it is impossible to maintain that the existence of unemployment is incompatible with conditions of final equilibrium and lends authority to the popular opinion that inventions tend to reduce employment.

The concept of zero saving which is fundamental to the discussion of long-period equilibrium equally in the "Classical" and the "General" system of analysis is next elaborated. A long period of equilibrium requires that the amount and distribution of income and wealth shall be such that the total of net saving is zero. The condition for this stable equilibrium is more likely to be fulfilled the more ample is the provision for the unemployed and where such provision exists not through taxation, but by borrowing whether private or public, only a Jubilee Year of the Jews will restore the equilibrium. The essay on "Disinvestment" is interesting as the principle governing disinvestment is of great importance in many departments of economic analysis. It has peculiar significance when applied to the problem of declining population. The deleterious effect of a decline in population upon investment may be offset by taking measures calculated to increase the propensity to consume. Following this essay comes a diagrammatic illustration of some of the propositions in the foregoing analysis. This treatment, no doubt, is subject to grave objections since few of the concepts can be reduced to precise quantitative terms. But as an alternative method of expressing them a graphical representation is of greater use.

Part III consists of two essays, both highly controversial and of great practical importance. The main endeavour of the author is to elaborate the hints thrown by Mr. Keynes in Chapter XXI of his "*Treatise on Money*."

"The theory of exchanges," says the author, "may be regarded as the analysis of the manner in which movements of the balance of trade and the balance of lending are equalled to each other." The reaction upon the balance of trade of an alteration in the exchange rate is examined at some length. The effects of depreciation on countries which produce manufactures and which produce raw materials are lucidly analysed and the conception of an optimum exchange rate is introduced. The different ways by which a tendency for the exchange rate to alter can be offset by changes in the home rate of interest are outlined. The author attacks the notion of the equilibrium exchange rate. Such a thing is a chimera.

The next essay funnily entitled, "Beggar-my-neighbour remedies for unemployment" deals with the devices by which the balance of trade of a country is sought to be increased. These are mainly four: (1) exchange depreciation, (2) reduction in wages, (3) subsidies to exports and (4) restriction of imports by tariffs and quotas. All the considerations as to which of these must be applied to a particular situation in a particular country are elaborately dealt with. At the outset Mr. Keynes comes in for violent criticism. By his denial that restriction of imports will increase home employment, Mr. Keynes "offers himself as a sacrifice." He has a confused view of the nature of the classical argument for free trade. "Indeed it is obvious to commonsense" comments the author, "that a tax upon imported goods will lead to an increase in the output

of rival home produced goods, just as a tax upon any commodity will stimulate the output of substitutes for it." Tariffs thus are an expedient for increasing the balance of trade when all else fails.

Three short but stimulating essays of a general nature originally delivered to a study circle at Cambridge form the subject-matter of Part IV. They seek to draw certain morals of far-reaching consequences from Mr. Keynes' *General Theory*.

In the essay on "Indeterminacy," the author lays down that the first task of the analytical economist is to discover the determinate problems on which to work. "To discover too much indeterminacy in the real world would deprive the economist of self-respect, if not the means of livelihood." But to discover too much 'determinacy' in his theoretical system ought to damage self-respect quite as much. Mr. Hobson and Mr. Hicks, for example, criticised the marginal productivity theory on the ground that it is not sufficiently determinate. But at the same time they display an over-anxiety to discover determinate solutions. It is a great merit in the General Theory of Keynes that while it contains problems of indeterminate intricacies, it yet saves the self-respect of tht analytical economist by leaving such problems as the determination of the real wages and the amount of employment to be discussed by him in his scientific way.

The essay on "An Economist's Sermon" is a most straightforward thrust at all those economic experts who burn their incense at the feet of vested interests. In this way orthodox traditional economics has done the greatest harm. It was only a plan for explaining to the privileged class that their position was morally right and was necessary for the welfare of society. His main theme is still the justification of the existing system. Economics had often played "the part of the dope of the religious." The blame is that of the economists who have sacrificed their honesty of mind and made it so fatally easy for the rich and pious to preserve an easy conscience.

The last essay is on "Some Reflections on Marxist Economics." Here the author explains that the Marxian theory of value is the direct outcome of the impasse created by the orthodox assumptions and reveals the apparently paradoxical view that Marx was in reality a classical economist. The Marxist doctrine from a scientific point of view may be wrong. But what is the use of an enervating intellectual subtlety with the baneful results of capitalism? "An untenable belief that leads to a successful revolution is to be preferred to a correct argument that allows a fetid society to rot undisturbed." The intellectual maintains that in the long run true beliefs will lead to successful conduct. "But in the long run we are all dead." These three essays reveal in what terms one of the clearest analytical economists of our time at Cambridge thinks of the problems of capitalism. The bracing air of this remarkable book will do good to every student of economics.

B. V. N. NAIDU.

THE TRADE CYCLE, AN ESSAY by R. F. Harrod. Oxford University Press. Pp. ix + 234. Price 10s. net.

The Theory of Trade Cycles has become the Mecca of most master minds in Economics and the amount of time and attention devoted by the various schools of economic thought to controversy in this regard are truly enormous. This is as it should be; for, even more than the ravages of war and disease those of industrial fluctuations have been responsible for much mundane misery. Mr. Harrod's Essay, in the author's own words, "presents the outline of a theory;" but it is not entirely a new theory, although the author claims that it is in itself "single and indivisible." Mr. Harrod has drawn upon three main groups of existing doctrines: (1) one regarding the "well-established relation, vouched for by experience and the laws of arithmetic, between the demand for consumable goods and the demand for durable goods," (2) the other, arising from the recent intellectual gymnastics of Mr. Keynes in his *General Theory*, and (3) finally, the recent researches in the theory of imperfect competition.

The central notions of Mr. Harrod's Essay can be grouped under two heads: those regarding the interaction between what he calls the Relation and what Keynes calls, the Multiplier, and, secondly, those relating to the three "dynamic determinants" which condition the progress of the trade cycle. Mr. Harrod claims some originality for both. The former can be explained as follows. The cumulative nature of industrial activity is described by Mr. Harrod in terms of the "Relation" (*i.e.*, the "acceleration" principle of derived demand, in some ways, the reciprocal of the "Multiplier") and the "Multiplier." The interaction between these two he calls the "central part of his theory" (p. 98). Thus he summarises the contraction phase (*but, mutatis mutandis*, the process holds also for the expansion) as follows:

> As soon as the downturn has begun, the rate of increase of investment slows down. This in accordance with the Multiplier, entails a further slowing down in the rate of increase of consumption. This, in accordance with the Relation, entails an absolute fall in net investment. This, in accordance with the Multiplier, entails an absolute fall in income and consumption. This, in accordance with the Relation, entails that net investment is rapidly reduced to a very low level, if not zero (p. 98).

There is nothing new in this description of the progress of events in a trade cycle. The cumulative aspects of the trade cycle have been described before by a host of writers from Wicksell downwards, though not quite in the same terminology or with so much elaboration. The merit of the Keynes-Kahn approach of the "Multiplier" lies in its systematic unravelling of the processes of the investment-consumption relationship; Mr. Harrod's perspective is from both the angles and his "Relation" is a terminological addition to existing theory. However, fortunately, Mr. Harrod himself does not claim absolute originality for the interaction theory, and admits that Professor J. M. Clark's *Strategic Factors of Business Cycles* was his inspiration in this regard. This theory of the interaction may be said to belong to the class of *endogenous* of theories, postulating as it does the existence of the germ of industrial

theories, postulating as it does the existence of the germ of industrial fluctuation within the system itself. Mr. Harrod has not been able, however, to give a consistent account of the upward *as well as* the downward movement of the trade cycle. He starts by considering a "condition of steady advance" (p. 102). It is easy then for him to prove that this "steady advance" cannot continue for long, because of the action of the "three dynamic determinants." This, according to him, establishes the "inevitability" of the trade cycle. That the trade cycle is an inevitable incident of progress has been emphasised by Vogel, Schumpeter and several other writers on trade cycle theory; but the reasons given by Mr. Harrod are somewhat original, and lie in the "three dynamic determinants."

The three determinants are: "(I) the propensity to save, (II) the shift to profit, and (III) the amount of capital used in production" per unit of output (p. 90). "The shift to profit" arises from two factors: (*a*) the law of Diminishing Returns—implying an increase in the ratio of marginal to average cost—and (*b*) the Diminishing Elasticity of Demand (p. 92). The latter notion, Mr. Harrod has elevated to the position of a "law," though one wishes very much that he had demonstrated its "lawness," first. His idea is that during a general advance elasticity of demand diminishes, because if people are better off, they are easily satiated of their current needs; but this ignores the possibility of their demand extending into *new* fields of consumption, *i.e.*, the feasibility of a constant general Elasticity of Demand. As regards the "propensity to save," Mr. Harrod says that "there is reason to believe that people tend to save a larger proportion of a higher income. . . ." and that "if this is so, the first dynamic determinant exerts a restrictive influence."

It is Mr. Harrod's claim that the interaction between the Relation and the Multiplier and the operation of the "three dynamic determinants" which generally "decree a slowing down in the rate of advance, and therefore a recession" (p. 111), provide the key to the trade cycle secret. The way Mr. Harrod has generally relegated the psychological theories (p. 45) of Professor Pigou and his school, the monetary theories of Hawtrey, Robertson and others (pp. 46—52), the "invention" theories of Professor Schumpeter and others (pp. 61 ff), and several others, to a second place, on the ground that they are not "self-perpetuating" theories, suggests that he regards his own explanation as a complete and "self-perpetuating" theory of the trade cycle. This optimism of Mr. Harrod, however, is not justified by the explanations offered. In the first place, his "dynamic determinants" have bearing, if any, only upon the recession aspect of the cycle; one fails to see how the "restrictive" influnces can also become liberating influences in the boom period. Secondly, Mr. Harrod seems to falter in his treatment of the "bottom" of the depression. He vaguely says: "Yet there is a bottom, or anyhow, there has been one on all past occasions" and proceeds "So long as there is some output, some replacement is necessary; this may give an opportunity for introducing more capitalistic methods." Moreover, inventions and improvements proceed—and are indeed diligently sought for by desperate entrepreneurs. . . ." (pp. 100-1). Finally, it is the amortization funds which are drawn upon to finance replacements and improvements. All

this looks very much like a makebelieve. It is remarkable, that a *dwindling* output provides a *steady* opportunity for replacement, that inventions are attractive not only in periods of booms and revivals (as is commonly supposed) but also in periods of depression, and that, instead of the wild-fire recession eating into the amortization funds and everything else, at last a rock-bottom is reached in the shape of the amortization funds. All this is desperately simple. Then, again, we are furnished with a very unplausible argument that

> Once the bottom is reached, revival is likely to come, for the mere passage of time increases the amount of replacements required to maintain a given level of output. This increase involves a rise of net investment. This gives scope for the three dynamic determinants to ordain a period of steady or cumulative advance (p. 101).

This much for Mr. Harrod's main contribution to the trade cycle theory. His *obiter dicta* on the Rate of Interest, the rôle of money, and of the foreign balance are embodied in a separate chapter. Mr. Harrod does not '" propound 'any positive theory of the rate of interest" (p. 120), but he gives utterance to some specious remarks about the nature of interest. "The long rate of interest is of its very nature influenced by long-term considerations" (p. 121); "There is a *suggestio falsi* in the word natural.... The natural level of the long-term rate may rather be regarded as that level at which, if dealers could foresee the future, it would stand" (p. 122); and "Thus it seems improbable that banking policy, however inspired and well informed, could secure a sufficient fluctuation in long-term interest rates to ensure a steady advance" (p. 125). But Mr. Harrod's pet aversion is the much maligned Quantity Theory of Money, as is clear from the discussion on pp. 125—145. But this discussion ought to be read along with Mr. Harrod's pronouncements on Stable Money (pp. 173—190) and the monetary theory of trade cycles (pp. 46—52). It were better if Mr. Harrod had stuck to his earlier "attitude of complete agnosticism" (p. 52), but on p. 179, he rather dogmatically asserts that "It is the dynamic determinants and not some forces connected with the effective quantity of money (MV) that *cause* the recession." (Italics his.) The "quintessence" of Inflation, according to Mr. Harrod, is not monetary expansion, but "the excess of government expenditure over tax receipts." Surely in all these utterances, Mr. Harrod is trying to exorcise the obvious. It is not necessary to adhere to the cruder versions of the Quantity Theory to disprove what he says. The recent revival of the world's economic activity, of course, contains sufficient arguments in favour of any view of the matter, but even the worst opponents of the monetary school cannot deny that it is the "cheap money" policy adopted by the Anglo-Saxon nations which has been the basic factor. Any cursory reflection upon the contents of the League Publications on the world's monetary conditions would suggest this.

Mr. Harrod's criticism of Mr. Robertson's hypothesis "that the amount that people spend in any period is related not to what they earn in that period but to what they earn in the preceding period" is unconvincing and superficial. This, according to him, is a "treacherous and dangerous region where time-lags are met with at every turn" (pp. 127 ff.). And yet, it must be said, Mr. Harrod's own theory of the interaction between the Relation and the Multiplier dangerously verges upon being

a " time-lag " theory; if it is not that, a simultaneity of the two movements must defeat itself. The reviewer has no particular sympathy for Mr. Robertson's view of income or saving; but the criticism of that view can certainly not be based on an aversion for time-lags. Between cause and effect there must always be a time-lag, though this does not mean that simultaneous and continuous action and interaction of a number of interdependent forces is not a regular feature of the eternal flux of economic life. Mr. Harrod may be justified in saying that we cannot consider the several forces as remaining in abeyance while their off-shoots are working themselves out, or as moving sporadically and discontinuously; but he is surely not justified in abolishing the time-sequence or lag which is implicit in all causality.

However, the above criticism is meant to bring out the drawbacks of the author's theoretical structure rather than to condemn it wholesale. As a *tour de force* in economic writing, the *Essay on The Trade Cycle* will still have its place in the literature on the subject. While there is much agreement today as regards the course of the cycle and also, perhaps, as regards its therapeutics, a unified explanation as to the *initiating and self-perpetuating* cause or causes of the cycle must still be awaited. It cannot be, at any rate, one of those empty Chinese boxes of which economic theorists are indicted time and again. In the meantime, this work brings home to us the wisdom of the Upanishadic writers who very piquantly said: एकं सद् विप्रा बहुधा वदन्ति। (Truth is one; learned men describe it differently and in many ways)!

B. P. ADARKAR.

POPULATION MOVEMENTS, by Robert R. Kuczynski. Published by the Oxford University Press. Price 5s. net.

In this book are included three public lectures delivered by that wizard of population statistics, R. R. Kuczynski, at the University of London in March 1936. The lectures cover the following topics: (*i*) Our knowledge of the population of the earth, (ii) the peopling of America with Blacks, (*iii*) the people of America by Whites, (*iv*) reduction of morality, (*v*) reduction of fertility, (*vi*) the balance of births and deaths, (*vii*) possibilities of increasing reproduction, (*viii*) population movements and public opinion. In the first lecture, covering the first three topics, he dwells upon the irregularity, insufficiency and incoherence of census information for the world's countries, describing the difficulties of extra- or inter-polation in estimates. " Every student of population trends " he says, " should realise first of all that our knowledge of the number of inhabitants of the earth is rather vague. If he reads, for instance, that the world's population is now 2,080 millions, he should accept such a statement with great reserve. My own computations lead me to the conclusion that the actual number lies somewhere between 1,880 and 2,260 millions." From the facts and figures reproduced by Kuczynski, it appears that while information is available about the other continents within certain limits of reliability, Asia still continues to be the *terra incognita* in this regard, mainly due to China, the estimates for whose population " vary between

325 and 525 millions." The second lecture, covering the next three topics, gives in a very succinct form some of the main statistical methods adopted by Kuczynski; these will be found interesting by those who have not had an opportunity of reading his *Balance of Births and Deaths* and *Measurement of Population Growth.* According to Kuczynski, there is no further scope for population growth in the West by reduction of mortality; the mean expectation of life has risen to 60 years and " even allowing for all conceivable advances in hygiene and medicine, it seems unlikely that it will ever increase by another 15 yeais." " Mortality was the decisive factor in determining population growth in the past. The future population trend will depend upon fertility mainly." Coming to the recent decline of fertility, on the basis of the gross reproduction rate (the number of girls born to 1000 women in the child-bearing age), Kuzcynski declares that " the population of western and northern Europe as a whole is doomed to die out even if every newly born girl reached the age of 50." In the third lecture, the author considers the future of the gross and net reproduction rates themselves in the light of the possibilities of further diminution of mortality, an induced increase of nuptiality, and legislative restriction of Birth Control. The conclusion to which he comes is that " to increase fertility is a gigantic task " which cannot be essayed successfully so long as public opinion is averse to rearing bigger families. In the final topic, Kuczynski discusses the relation between public opinion, population movements, unemployment, economic develop-ment, migration etc. In the Appendix, there is a detailed, bibliographical discussion of the " Distribution of Races in Africa, America and Oceania."

B. P. ADARKAR.

PROBLEMS OF AGRICULTURAL CREDIT IN INDIA by B. B. Ghosh, Ph.D. (Econ.) (London). pp. 139. Modern Publishing Syndicate, Calcutta. Price Rs. 2/8.

This book is another addition to the large volume of available literature on the problems connected with agricultural credit in India. The extensiveness of such literature is, no doubt, sufficient testimony to the amount of public attention that the question has roused. To the logn-standing evils of poverty, ignorance, epidemics, seasonal disasters, usury and severe foreign competition have now been added the effects of a wide-spread economic depression. In a land where the large majority of the population who live and depend on agriculture are steeped in indebtedness the problem of agricultural credit must be of supreme importance. The question then arises as to what the nature of this credit should be. Cheap credit by itself instead of helping to solve the problem of indebtedness will serve only to add to the load of debt. What is wanted is credit that is controlled, heedful and cheap, credit that has the elements of national vigour, credit that is soundly based on self and mutual help.

Dr. Ghosh opens his book with a survey of the disabilities under which Indian agriculture labours today and describes the various credit agencies that finance it at present. Chapter I deals with the short-term

credit facilities to the agriculturists; and Dr. Ghosh suggests that a direct link should be established between the Central Co-operative Banks and the Reserve Bank so that the delay now caused by applying through the Provincial Banks might be avoided. Another suggestion is that the Central Co-operative Banks should be linked with the Scheduled Banks in order that the former may derive the advantage of re-discounting facilities. But this seems superfluous in the light of the first suggestion though it may be considered as an alternative. Dr. Ghosh next suggests the scaling down of debts by the Co-operative Banks in cases where loans are irrecoverable. This proposal is revolutionary in character; but it is commendable. However, the same thing cannot be said of the suggestion that Co-operative Societies should arm themselves with reserve funds by working on a liberal margin of profits. For, vast divergence between lending and borrowing rates militates against the true principles of mutual association. Profit-seeking is a commendable motive of Joint-Stock Banks, but not of Co-operative Societies.

That intermediate credit which extends for a period of 1 to 3 years should be provided by the Reserve Bank is the plea put forward in the second chapter. According to Dr. Ghosh suitable warehouses should be constructed by the Reserve Bank through the Agricultural Credit department in collaboration with the Imperial Council of Agricultural Research. The outlay necessary for such construction would be too great even for the Reserve Bank; and therefore Mr. Madan's suggestion for independent warehouses constructed by groups of persons seems more feasible. In the initial stages, however, private enterprise may be subsidised by Government. The next chapter deals with the long term credit needs of Indian agriculture. The author remarks that suitable credit facilities should be supplemented by additional remedies for the eradication of indebtedness; but he does not dwell sufficiently on these remedies. He is opposed to the purchase of debentures of the Central Land-Mortgage Bank by the Reserve Bank; but this practice will infuse confidence in the public regarding the debentures of the Land-Mortgage Bank. Moreover it may be noted that leading joint-stock banks in England have invested large portions of their funds in the Agricultural Mortgage Corporation. Dr. Ghosh's idea of converting the Loan Offices of Bengal into Joint-Stock Land Mortgage Banks deserves serious consideration. The functions of the Agricultural Credit Department of the Reserve Bank are discussed in the concluding chapter. In giving an account of the Nidhis and chit funds the author could have examined with profit the possibility of these institutions developing into full-fledged village banks. Two appendices are added containing some Sections of the Reserve Bank Act and a list of the banks scheduled to the Reserve Bank.

The book is written in a simple and lucid style and will be of some use to undergraduates and to those who wish to pick up an acquaintance with rural credit facilities in India. The usefulness of the book could have been increased by bringing the statistics up-to-date and by adding a bibiliography. The get-up of the book is good though the price is exorbitant.

B. V. NARAYANASWAMY NAIDU.

WORLD ECONOMIC SURVEY FOR 1936-37, published by the League of Nations.

The publication under review brought out by the Economic Intelligence Service of the League of Nations is the sixth Annual of its series. As usual it gives a survey of the world economic factors affecting production, trade, labour conditions, monetary problems, price-levels etc. etc. The Survey is divided into 9 chapters:—

I. An alignment of currencies.

II. Factors of expansion.

III. Production stocks and trade.

IV. Rising price-levels.

V. The improvement of labour conditions.

VI. Increasing world trade.

VII. The conflict in Commercial policy.

VIII. The control of credit.

IX. The economic situation in July 1937.

The book is suffixed by a chronological list of economic events of the year.

In the first eight chapters the author has summarised the statistical material whilst in the ninth he has briefly reviewed the world economic situation as he found it in July 1937. Unfortunately since July last the position has become worse. Prices of commodities and securities—especially of companies manufacturing heavy goods—have fallen with a crash and there is no knowing where it will end. The uncertainty about the renewal of the International Silver Agreement which expires on 31st December 1937 has further added to the nervousness of the operators on the stock exchanges. The topic of the day is whether recession in trade and industry has set in or whether the present fall in prices is only a passing phase. Experts are divided in their views. The "Economist" is yet hopeful of recovery. Whatever may be the eventual result we observe that the Exchanges are daily experiencing bear raids. The slump mentality is in ascendency, started no doubt by the Wall Street.

There can be no two opinions about the usefulness of the Survey. It gives authentic information and makes an impartial review of the world events. The League of Nations may have failed in other directions but in the economic field it is performing highly useful work in the collection and dissemination of economic intelligence. This survey is one of the many useful publications we owe to the Economic Intelligence Service of the League of Nations. No library worth the name can do without it and no serious student of the subject can afford to miss it.

K. L. G.

AGRICULTURAL CREDIT by A. I. Qureshi. With an Introduction by Joseph Johnston. Published by Sir Issac Pitmans & Sons, London. pp. 190 plus XI.

This is a publication by Mr. Qureshi dealing with Agricultural Credit in the United States of America. At first sight it might appear that it is likely to be of interest to only a limited number of specialists such as practising Agricultural Economists and administrators; but we are of opinion that it is likely to be useful to even those who do not belong to the above two categories. However, the reader who may be looking for light from the West on the problems of Rural Credit in India will need to be on his guard against too ready an application of American ideas and institutions to Indian conditions. It is true that the institutional problem of Agricultural Credit in the U. S. A. is largely governed by the fact that the ordinary Commercial Banks though numerous do not reach down and give adequate banking service to rural communities; and this is precisely the position in India also. But this similarity should not lead us to the conclusion that what has succeeded in American conditions, is likely to succeed in India also without any modifications.

With the above warning we may now place before the reader main ideas in the book. The matter contained in the book, in the words of Dr. Qureshi, " is the result of information and impressions gained during my visit to the United States in the summer of 1935 in connection with my World tour to study the system of Rural Credit and Marketing Organisations." The book is divided into eight chapters. Chapter I is historical and deals with the Banking Organisation of the United States of America specially in connection with Agricultural Credit facilities that existed up to 1916. In Chapter II, Dr. Qureshi has discussed the Federal Farm Loan System, while in Chapters III, IV, V, VI, and VII, the War Finance Corporation, the Federal Intermediate Credit System, the Federal Farm Board, the Reconstruction Finance Corporation, and the Farm Credit Administration, respectively, have been succinctly described and critically examined. In Chapter VIII, Dr. Qureshi has offered his concluding remarks, and has set himself to answer the question " Will Credit alone cure all the ills of agriculture?" His answer is in the negative. He observes that the only permanent prosperity for agriculture must be based on a gradual increase in the consumption and production of an increasing variety of useful things.

The book is an exceedingly well planned and well written dissertation on Rural Credit Organisation in the United States of America and we feel no hesitation in recommending it to all those who may be looking for helpful suggestions for tackling the problem of Agricultural Credit in India.

B. G. B.

Organisation and Finance of Industries in India, by Samant and Mulky. Published by Longmans. Price. Rs. 5.

The book under review is one of a series of volumes edited by Prof. C. N. Vakil of Bombay, dealing with studies in Indian Economics. The learned Editor writes in his preface that the present work in its original form was done in the form of theses for the M.A. Degree of the Bombay University by Messrs Samant and Mulky, and subsequently the material of the two theses was coordinated in the form of this volume. The work is a useful publication and as these for the M.A. degree it is highly commendable.

As the title of the book indicates it deals with the organisation and finance of industries in India. A chapter is devoted to small-scale industries as well. The book is divided into XI chapters with an appendix on the Indian Companies Act of 1936 which gives the salient features of the new Act.

In Chapter I of 11 pages the authors give a bird's-eye-view of the industrial enterprise before and after the introduction of machinery and discuss the present position, pointing out defects and suggesting remedies. We admit that it is a sort of introduction, but even as that, it is very sketchy and the authors have hardly touched a problem before they have passed to the next in their synopsis. In their zeal for industrial combinations they make some loose statements. Here are some specimens. "It is a well-known theory of industrial organization that the cost of production decreases as the scale of production increases." It is not so in all cases and to any extent. There must come a stage, sooner and later, when this maxim will not hold good. Another: "*These combinations are often able to dictate their own terms to the world.*" While only in the next paragraph they recommend "one of the ways of achieving this, and the most important one is to widen the dimensions of business units by organizing cartels on the lines of our competitors. There is a time-honoured complaint against such combinations, that they tend to become monopolists and try to regulate prices at the cost of the consumer. But this argument has been proved to be false by the recent growth of industrial combinations. *The aim of the modern combinations is not to regulate prises but to reduce costs.*" (page 10).

The statements underlined in the above paragraph are self-contradictory. Again they write, "Industrial combinations will prove of special advantage in India so far as they will be in a better position to influence the Government as regards tariffs, store-purchases, etc." While we appreciate the legitimate claims of our Industries for tariff, we are opposed to combinations in industries for coercing the Government to the dictation of the industrialists. We do not think for a moment that our authors want to introduce some of the corrupt practices of foreign cartels and trusts. Our industries must first be rationalized, and, if in that connection, combinations are found necessary here and there, they should be welcomed, but we must not be mad after cartels.

Chapter II.—The authors have correctly pointed out the difficulties of company promotion in India, but many of the statements regarding Managing Agents in this chapter and the subsequent one are out-of-date

in view of a thorough revision of our Companies Act which has considerably reduced the powers of the Agents and made the task of the Company auditors more onerous. The authors have made a useful suggestion for the formation of Council of Executive which should serve as an advisory body to the Board of Directors of a Company.

CHAPTER III.—This chapter is devoted to the discussion of the Managing Agency system in all its bearings. They have pointed out the defects and suggested remedies most of which are incorporated in our new Act. It may here be said that whilst Dr. Loknathan, in his book 'Industrial Organization in India' has shown a soft corner for the European Agents at Calcutta, our present authors have condemned all alike. At places they have accused the Managing Agents rather unnecessarily. Criticising the Deposit System found at Ahmedabad and Bombay they remark, "If the Agents cease to be intermediaries between the depositors and the concerns, the funds, in all possibility, will be deposited directly with the concerns, as is done in many cases even to-day or with the banks." We think it shall remain only a pious hope. Here our authors are rather unfair to the Managing Agents. We may accuse them of so many other sins of omission and commission but it must be said to their credit that it is they who inspire confidence in the depositors and not the companies of which they happen to be the Managing Agents. It is a special feature in India that the people have more confidence in big family firms than in banks.

CHAPTERS IV to VI.—Chapter IV enumerates and discusses the various forms of commercial securities and makes helpful suggestions here and there. The authors suggest the issue of Redeemable Preference Shares which is already a *fait accompli* in the new Act. In this connection we suggest Participating Preference share which should grow more popular in this country. The authors have suggested ways to popularise debenture issues. Chapter V relates to Initial Capital and Chapter VI to the financing of Working Capital. The authors rightly point out the defects of under-capitalization of our companies. A large number of companies have come to grief because of the miscalculation of the capital needs of the enterprise.

CHAPTER VII.—Depreciation is a highly technical subject and we may be pardoned to say that its treatment lacks clarity of thought. We agree that our cotton mills must include depreciation as part of the cost of production and that it must not be dependent on profits of a concern. Profits or no-profits depreciation must be provided. But it may be represented in the form of a Fund on the liabilities side of a Balance Sheet or reflected in the form of a reduced value of the asset concerned. Again the Fund may be invested outside or may form part of the working capital of the company. There is no wisdom in borrowing at 6 per cent and investing your own money at 3 per cent in Trustee securities. The Bombay mills were guilty of not providing depreciation during and after the War, when they made abnormal profits and declared very high dividends. As against this, the Japanese mills amply provided and rehabilitated their machinery in due course. Our authors forget one thing more. Whilst the Cotton Mills are guilty of not providing depreciation, the Jute Mills, the Tea Companies and some others have made huge re-

serves and have amply provided for all contingencies. They have discussed only the cotton mills and generalised therefrom. The suggestions regarding the dividend policy are sound.

CHAPTER VIII.—The authors urge the necessity of establishing Industrial Banks, Investment Banks, and Investment Trusts. We agree. But we differ with them when they say, "The restrictions on Investment Banks about commercial banking do not mean that commercial banks should not undertake investment banking." At another place they say investment banking means long-term investment. Now when you are urging the etablishment of Indusrial Banks, Investment Banks, and Investment Trusts, why not leave the Commercial Banks to pursue their own functions, namely, for providing short-term credit by discounting bills of exchange, or granting cash credits or overdrafts or hypothecation of goods or materials.

CHAPTER IX.—Here the authors give the advantages of the Stock Market and trace the history and growth of the Bombay Stock Exchange. They are generous to spare a paragraph for Calcutta Stock Exchange as well.

CHAPTERS X and XI.—Chapter X deals with the organisation and finance of small-scale industries. The authors have given an account of the existing credit agencies and made suggestions for increasing banking and cooperative credit facilities. (Chapter XI.) The authors conclude with the advocacy of state aid to industries. They have given a short history of the state aid in the various provinces and have quoted instances from Germany, Japan, France and U. S. A.

Excepting for some loose statements here and there the book gives useful information on company promotion, organization and finance. It would have been better if the authors had revised their work in the light of the new Act. We hope they will do so in the next edition. We commend the volume to all students of the subject.

K. L. G.

THE LAW OF PAKKI AND KATCHI ADAT AND TEJI-MANDI CONTRACTS by Ramniklal Mody. Published by Messrs Tripathi and Co. Price. Rs. 3.

Our business transactions are partly regulated by Commercial Law and partly by commercial usage and custom. Hundi, for example, is like a Bill of Exchange, but it is not the same thing as a Bill of Exchange and is not a negotiable instrument as such under the Negotiable Instruments Act. It is, however, a negotiable instrument by mercantile usage and custom. Then we have many kinds of Hundis—Shahjog, Jokhami and others whose equivalents we do not have in Bills of Exchange.

Adat system is another example of a mercantile practice, now recognized by law. It is partly governed by law, so far as it comes under the law of contract and agency, and partly by commercial custom. The book under review gives a comprehensive account of the Adat system together with the case law on it prevalent in the Bombay Markets. This system is not confined to Bombay alone. It is found all over India. In fact, this institution seems to be sufficiently old although the case law on it is only as old as 1904.

The book is divided into 3 parts—Part I deals with the Pakki Adat system, Part II, the Katchi Adat system and Part III deals with the Teji-Mandi contracts. All the leading cases bearing on each part are discussed. The size of the book is considerably increased owing to the incorporation of the cases *in extenso*. At the end of Part II the author has compared and contrasted Del credere Agent, Katcha Adatia and Pakka Adatia—their respective function and legal status. In another chapter the points of distinction between the Pakka and Katcha Adatias are given fully.

Part III deals with Teji-Mandi contracts in all aspects. The author discusses the practice of the London Stock Exchange where such contracts are designated as 'Put Option' and 'Call Option.' In this connection we may remark that speculation verging on wager is very much growing in our Mundis. While we admit that it steadies prices and shifts the burden to the shoulders that are best fitted to bear it, it has got serious disadvantages too. The so-called chambers of commerce in our Mundis are nothing but agencies to regulate forward dealings. There is need of some specific legislation in this connection.

The publication is useful. It gives a good deal of information on a very technical branch of Commercial Law. But there are many mistakes which could have been easily avoided by a careful reading of the proofs. There is also a certain amount of repetition of facts and ideas here and there. Excepting for these minor faults the book is informative and we commend it to the lawyers and students of Commercial Law.

K. L. G.

THE INDIAN SUGAR INDUSTRY (1937 ANNUAL) by M. P. Gandhi. Price: Rs. 2/4.

It is the third Annual on the sugar industry in India by Mr. Gandhi. The present volume is decidedly an improvement over the past numbers, As usual the book gives a great deal of information and a number of statistical tables. Mr. Gandhi has now become an authority on the sugar industry which is at present receiving the greatest attention of the people and the Governments. Recently we had an enquiry by the Tariff Board and our learned author submitted a very informative memorandum which is also incorporated as an appendix in the present volume.

In May, 1937 an International Agreement was entered into regarding the regulation of production and marketing of sugar. The representative of the Government of India at the International Sugar Conference exercised the self-denying ordinance, according to which India would not export any sugar except to Burma, for a period of 5 years, during the currency of the Agreement. Fortunately for the country the Central Legislative Assembly has not ratified the Agreement. We do not know what action our benign Government proposes to take in this connection. Mr. Gandhi has sent us a memorandum on this issue as well along with his Annual, He has made out a very strong case for export of our sugar to the United Kingdom and we mostly agree with his views.

In the year 1934 the Government of India imposed an excise duty on sugar partly to check the mushroom growth of sugar companies and partly to raise revenue. Again in February 1937 they enhanced the excise duty by Rs. 2 per cwt. This was done at a very inopportune moment and it very adversely affected all interests. It was through the timely intervention of the U. P. Government that our standing cane crop could be crushed by the millowners. For the first time in September, 1937 there was a joint conference of sugar manufacturers and cane growers under the combined patronage of the U. P. and Behar Governments, the two most important sugar producing provinces. It is hoped that these two Governments will adopt measures to rationalize the industry and harmonize all interests.

The one problem which needs immediate attention is the problem of molasses. If this by-product can be profitably utilised our industry has assuredly a bright future. The learned author has fully discussed this problem along with others. We congratulate him on his work.

There is, however, one thing which we have not liked in the present volume. It is the inter-leaving of advertisement pages in the text of the book. It makes the reading of the book irksome. If the author can give the advertisements at the beginning or the end of the book, he will earn the gratitude of his readers.

K. L. G.

SUCCESSFUL SPECULATION IN SHARES by R. R. Nabar.

Stock Exchange is the counterpart of joint-stock enterprise. In India the growth of joint-stock companies is yet in its infancy compared to the population and resources of the country. There is, therefore, no surprise if 'the subject of stock exchange speculation is at present very little understood by the great majority of people in this country.' But we observe that our investors are showing an increasing interest in stock exchange dealings.

Speculation is a subject which needs a thorough study of the principles of economics, company organization and finance, criticism of published accounts of companies, and forecasting of the future possibilities of the earnings and capital appreciations of enterprises. Judged from these standards the book under review is not helpful. It may

provide an interesting reading for a section of the operators on the Stock Exchanges, but a serious student of the subject finds little food for thought.

Mr. Nabar recommends that a wise speculator should concentrate on one share only. He should not 'dabble' in more than one share. On page 99 he writes, "For all these sound reasons, expert speculators usually confine their attention exclusively to only one share and their knowledge of it is so perfect that they can foretell its movements as if they were true prophets." As an able writer puts it, "Investigate the working—that is, the moneymaking—life of Rothermere, Zaharoff, Ford, Carnegie... or any other big capitalist. You find that every one of them concentrated in his fortune-building phase on a single activity......"

We think the analogy does not hold good. Here the one activity of the speculator is 'speculation.' It can never mean that he should speculate in one share only. In fact, the principle of investment is to average out the risk by investing in different classes and that rule must hold good for scientific speculators too for whom probably our author has taken pains to write this volume.

On page 108 Mr. Nabar says, "Let us hope the time will soon come when the claims of this new profession of speculation will also be recognized by the universities of those countries in which speculation is carried on in an organized manner." Speculation as a subject for scientific study is included in the courses of practically every university of the world, but we doubt very much if it will be possible to give the students practical training of this profession. To our mind this is not the function of the university.

K. L. G.

THE INDIAN COTTON TEXTILE INDUSTRY, by M. P. Gandhi. Price: Rs. 2/4.

Mr. Gandhi is the author of several treatises on Indian cotton and sugar industries. The present monograph was written in 1930 and is published in a revised form this year.

For centuries at least cotton industry has been the foremost industry of this country. In its present form it started during the American Civil War and in spite of legislations passed at the instance of Lancashire the industry grew up steadily. It got a fillip during the Great War. At present the competition is keener from Japan than from Lancashire.

Our learned author traces the growth of the Indian Cotton Industry, during the Hindu, Muslim and the British periods and gives us the present position of the mill as well as the handloom industry. Under the caption 'the Cotton Industry at a glance' he gives a number of statistical tables which must be found very useful to the student as well as the businessman and the investor. A list of the cotton mills in India with the names of their Managing Agents etc. is added as an appendix.

Mr. Gandhi, as usual, advocates high tariffs and he accuses the Government right and left for all their sins of omission and commission. We also do not hold a brief for the Government and are for judicious tariffs, but we must frankly say that our cotton millowners, especially at Bombay, have been greater sinners than sinned against since 1914. Is it not a fact that some of them paid fabulous dividends during and after the Great War? Did they not unnecessarily water their capital? Did they provide Depreciation Funds during the periods of boom to rehabilitate the industry as the Japanese millowners did? As soon as the industry fell on evil days in 1923 they raised hue and cry and approached the Government for aid. Could they not do a great deal to stabilise the industry themselves? Instead of creating reserves they dissipated all their earnings in the form of fat dividends. An industry must first rationalize itself before it should approach the State for help. There is considerable room for increasing the efficiency of the industry.

We believe the monograph to be a useful publication and its usefulness is increased manifold by the statistical tables given in the preface as well as in the course of the text.

K. L. G.

THE L. S. O. OF NATIONAL DEFENCE by P. M. Rae (with an introduction by Dr. Paul Einzig). (Hodge—6 sh. net.)

As Dr. Einzig himself has indicated in his preface to Miss Rae's book, "the views may be unacceptable to those who find it impossible to break away from the orthodox conception." It is not because of any orthodoxy on our part that we quarrel with some of the conclusions of Miss Rae, in a later part of this review, but because her treatment of the subject is essentially one-sided and the picture she has presented of the economy of Britain today, is essentially a broken one.

While there has been no general boom in Britain, such Recovery, as there has been is largely to Rearmament, is, in the main, the finding of Miss Rae. The urgency of rearmament requirements, she remarks, strengthens the bargaining power of unions, and this will secure relatively high levels of wages. We also agree with the authoress, that though the degree to which rearmament race has been accompanied, by an increase in Government Control, varies from country to country, it is smallest in Britain. It is unfortunate that Miss Rae has not stressed the essentially temporary nature of the fillip given to metallurigical industries, by the rearmament expenditure. It must be emphasized as Mr. Cardog Jones has done, that it is the duty of a Government financing armament expenditure, to have plans for other types of expenditure, when by a stroke of the official pen, such armament expenditure comes to a sudden end. There is also the danger in the distortion given to the productive apparatus of a nation, which earmarks a large proportion of her capacity for the production of goods for the requirements of national defence. We may also incidentally notice, that financing rearmament largely by borrowings (after the withdrawal of the National Defence Contribution) would naturally throw another strain on the gilt edged market. We would do well however to congratulate Miss Rae, on

her adequate discussion of the several possible effects of armament expenditure, on the economy of Britain, on her price level and on her exchange rates. She has put the relevant questions, though, in all cases she has not given the relevant answer. We are however at one, with the conclusion of the author, that such expenditure, if prolonged, would not only lead to advanced inflation (in fact, before the majority of public opinion awakens to it), but to some form of capital levy. While realizing the tonic effect that Armament expenditure has had on recovery, we would do well to realize, that " the sooner rearmament can be arrested by international agreement, the less difficulty there will be in devising an alternative, in expanded international trade, or in peaceful public works, to absorb armament workers.

M. K. MUNISWAMI.

PUNJAB ECONOMIC BOARD

UNEMPLOYMENT INQUIRY

The Board of Economic Inquiry, Punjab, is conducting in the districts of Lyallpur and Hoshiarpur an inquiry into the extent of unemployment among the educated youth of the villages. The inquiry in Lyallpur is complete and a provisional report is being prepared. In this district over 400 villages were visited by the investigators of the Board and particulars from some 600 people recorded. The inquiry is in two parts. The first relates to " samples " drawn from a list of all those who have matriculated from some school in the district since 1926: for the second all those who have passed at least the matriculation examination in certain villages have to be interviewed. In the Lyallpur district there were 379 such " samples " of the first part: the number of villages studied in the second was 120.

In Hoshiarpur the investigation is commencing. A list of approximately 100 villages has been prepared in which all matriculates will be interviewed; the " samples " number 440. To expedite work four investigators are being detailed to this district. The Board hopes that the public will be good enough to assist by lending co-operation in the supply of full particulars.

The Board is unable to offer any further paid employment and no application of this nature can be entertained. The Secretary will, however, gladly supply a form of questionnaire to anyone in either district who may volunteer assistance.

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RECENT TRENDS IN TRADE CYCLE THEORY

BY

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Introductory.

There are still many differences in the present state of Trade Cycle analysis. Thus it has not been clearly settled, whether the demand for capital goods is derived from or alternative to and competitive with the demand for consumption goods, whether a rise in the rate of interest will cause depression in the capital goods industries, while consumption goods become particularly profitable. It has not been possible for me to clear and settle such problems. I have in this paper attempted to discuss the scope and limitations of the doctrine of acceleration, which has been in prominence in recent trade cycle analysis. Following Keynes and Harrod, I have emphasised the necessity of a re-orientation of outlook in regard to trade cycle as a well established fact by such authorities as the state and railways. I have concluded that it would be possible, though not to eliminate, at least to mitigate the ravages of the Depression. If this new policy does not become universal, we may have to resort to birth-control and to a ban on future technological progress, to achieve economic stability under the existing system.

Historically, the several Business Cycles certainly differ from each other in details; but all of them have one family characteristic, that after a considerable amount of expansion there is a crisis or upswing of the course of expansion, leading to depression, from which again is generated a revival leading again to a boom. It is not possible to distinguish clearly between the originating, the accelerating, and the limiting forces in trade cycles, for very often the originating gradually shades into the accelerating force, and as all economic forces act in cumulative manner (as a result of the operation of optimism or pessimism), the borderland separating the orginating from the other forces is very small.

Recently (*vide* Harrod: *The Trade Cycle*) the principle of acceleration has come in for prominence; it should be noticed that this is a refined edition of the earlier theory of under-consumption or oversaving as found in the writings of J. A. Hobson

and Foster and Catchings. These writers contended that the cause of oversaving was to be traced to unequal distribution of income and they demanded equalisation of income for reducing fluctuations in output. In their opinion, profit recipients ought to have expanded their consumption rather than invested their surplus incomes in fixed capital. Investments fail, according to these writers, not because that they cannot be kept up and replaced by a failure of savings, as Dr. Hayek would have us believe, but because, the investments result in an abundant supply of consumers' goods, which are not absorbed because of deficiency in consumer's income. Relatively to the means of the ultimate consumer, Mr. Gayer writes, "The vast expansion of capacity in durable goods industries and the huge volume of domestic and factory buildings erected, were excessive in the U.S.A." (in 1929). The crisis develops, when the new productive processes which generally come in a swarm are completed, and the additional flow of consumers' goods appears in the market.

There is difference of opinion as to whether the disturbances originate from the capital goods or from consumers' goods. To attempt to solve this riddle would be like attempting the old question whether the hen or the egg came first. There has however been a tendency to stress more the view that these disturbances originate from consumers' goods' side. It is the capitalistic technique of production—the fact that a long time must elapse before the output of consumers' goods can be increased, that overstimulates construction; that is to say, slight fluctuations in consumers' demand produce large fluctuations in the demand for fixed capital. The fluctuations in capital industries in turn react upon the demand for consumers' goods. The oscillations, once started, like the swing of the pendulum, tend to last for some time. Professor Aftalion compares the time required for the manufacture of the means of production, to the time which elapses between the moment of kindling a fire and the moment at which, it actually begins to give off heat. "If one kindles a fire, he has to wait before he has the desired temperature. As the cold continues, he is tempted to throw more coal on the fire and the result ultimately is, when coal has been thrown in continuously that the room is overheated." As adequate foresight and a systematic unified control are impossible under the existing system of production, such disparity between the output of capital and consumers' goods would seem to be inevitable. This principle of acceleration has been worked out both with reference to the expansion and the contraction aspects of trade cycles. We must however notice certain limiting factors, in the

absence of which only the acceleration principle would work. Thus, when the existing capital equipment is being only insufficiently employed, there would naturally be no new investments as a result of any increase in the demand for consumers' goods. Further, unless credit facilities are elastic, this principle would have no scope for operation.

There are also other limits to this expansion process. As Keynes has pointed out, the increased incomes accruing from the increased investments tend to have their influence on consumption. The public, when they earn larger incomes, increase the scale of their savings. Owing to the fall in the demand for consumers' goods, in terms of money, particularly when the supply of such goods has increased, the incentive to invest in capital goods is ultimately retarded. We have thus the development of the "Crisis." Indefinite acceleration would be impossible, when savings exercise their deflationary influence. Even Mr. Macfie, a follower on the whole of Dr. Hayek, has to admit that the ravages of the typhoon of the Depression are not only confined to capital goods; the saving Bacillus attacks consumption goods as well. Among the propertied classes, the fluctuations in the proportion of incomes saved, tend to oscillate violently with their incomes, as their standard of living is generally much less flexible than their incomes. They dissave during the slump and save during the Depression. Their 'forced spending,' as Mr. A. F. Knight has described the process, prevents the acceleration of the contraction process in a short period and mitigates the swing of the cycle. Joint-Stock Companies similarly accumulate reserves out of net revenue in good times to disburse them to shareholders in bad periods.

Mr. Fisher ("Clash between Progress and Security") has emphasised how vested interests affected by a decline in consumption of their products, fight hard to retain their position and do not easily undertake the production of substitutes for which consumers may show a preference. Such obstacles to expansion would seem to stand in the way of the working out of the principle of acceleration. Ultimately however, this principle asserts itself, for during the later stages of an expansion process, the larger proportion of incomes earned tends to be spent. This would give fillip to the production of consumers' goods, which in turn is transmitted to the production of investment goods. This increased spending is largely the result of wages rising as fast as profits, due to the pressure exercised by Trade Unions in the modern world. But it must be remembered, as shortage of materials and men becomes pronounced (particularly in

countries confronted by a declining population), production becomes less and prices rise higher and higher. At this stage, we may have in fact greater spending, for many buy goods, lest they should be forced to pay, higher prices for such goods, if they are to buy them later, when prices would have risen still higher. This increased spending in turn leads to enormously increased investment, but as this increased spending does not last long, ultimately the increased supply of consumers' goods from the increased investment is confronted with a vanished market.

When studying the contraction process, we must similarly notice that a fall in consumers' demand is not at once followed by a violent fall in capital equipment. Owing to the rigidity of a number of cost items, it is not easy to follow up declining consumption by reducing capital equipment immediately. Fortunately however, at this stage, as individuals and institutions utilize their hoards or reserves, the situation does not worsen for some time. But in essence, contraction like the expansion process is cumulative in nature. Though obstacles may be placed in the form of prevention of new entrants and in the form of feverish sales of such assets or securities, as the tottering industries have to cover their losses for some time. (Keynes has emphasised rightly that such sales have ultimately a deflationary effect as they depress the prices of assets in question.)

In spite of the limiting factors, as investment is usually financed not with past voluntary savings but with credits which anticipate future saving, we must always admit the possibility of maladjustment between investment and saving. It is not possible therefore for consumption to regulate investment effectively or permanently.

The value of the acceleration theory largely lies in the fact that it enables us to realise simultaneously the importance of psychological influences operating both during the upward and the downward swing of the cycle. If we accept the explanation offered by Keynes, Harrod, J. M. Clark and others we are confronted with the necessity, ultimately, of filling up the gap created by the decline in spending on the part of the public when they are confronted by an increased supply of consumers' goods. (Mr. Bretherton in his note in the *Economic Journal*, September 1937, has emphasised that Mr. Harrod has on the whole exaggerated the decline in consumption, consequent on increased incomes and the tendency to oversaving on the part of the wealthy. But he admits the essential validity of the thesis of Mr. Harrod.)

It is ultimately to the State that we must look for supplementing, and for compensating the decline in individual spending. In West European countries, with increased capital equipment on the one hand, and with the tendency to decline in population on the other, the amount of *per capita* saving is likely to increase and most of it would have to be absorbed through an increase in the amount of capital used for a unit of output. (I use the term 'Capital' in a wide sense, embracing within its scope all wealth used in the process of bringing finished goods to markets, including the wealth employed by traders in the holding of stocks of the commodities.) For insuring maximum investment and maximum consumers' incomes, Mr. Keynes wants that the rate of interest should be reduced to the lowest possible level—if possible, to zero. It is doubtful however even if such a drastic fall in the rate of interest be feasible, whether in a short interval or "breathing space" a fillip would be given to investment and consumption. Recent experience in England has disclosed the limitations of cheap money policies. (*Vide* Benham: *British Monetary Policy*.)

Ever since the publication of Keynes' *Means to Prosperity*, Economists have been stressing the beneficial repercussions of a capital programme during Depression. At present, public authority in many countries is merely following in the footsteps of private enterprise, being swayed by the same influences, increasing investment when private enterprise increases it and reducing it, when private enterprise cuts it down. This policy would have to be reversed and the treasury should either through taxation or preferably through borrowings finance public works during Depression. Mr. Harrod has recommended that there should be an expert body in all countries concerned with the study of the trade cycle and having neither political bias nor concerned with prospect of general elections.

We would do well to realise at once the limitations and defects of this machinery so that we may have to be content with small results. As Mr. Keynes himself has pointed at each stage, "There is, so to speak, a certain proportion of leakage; a certain proportion of the increased income is not passed on in increased employment. Some part will be saved by the recipients; some part raises prices; some part is merely a substitution for expenditure previously made out of dole or private charity or personal savings."

Though a few economists, like Robbins, are preoccupied with the question of averting a boom when taking measures towards recovery, most economists are discussing how far the present

expenditure on armaments in Europe, apart from the temporary fillip that it gives to the production of certain goods, is likely to prove a permanent factor towards recovery.

Going further than Mr. Keynes, Mr. Harrod has recommended subsidies in favour of additional employment during Depression, and penalties on employment during boom periods. It might be necessary, he feels, to penalise by fines, the firms which allow their output to relapse during Depression periods. The whole scheme, he says, might be made self-supporting like the pool of a cartel, the fines on some being used to pay the bounties meted out to others. The case for such a device is specially strong in such countries as the U.S.A. where investment has become the by-product of the activities of a " Casino." I grant that the real danger of any heavy capital programme lies in the possibility of an excessive burden of interest rate, due to the possibility of fall in prices. But it is the aim of these devices, by maintaining spending, to prevent such fall in prices. If they fail to achieve this result, drasting scaling down of all claims including those on the state would become at once just and necessary.

As in Sweden the state should approach its financial problems from a much wider angle than that of securing a balance over a twelve-month period. Harmful or mischievous economic effects should be prevented from state expenditure. Joan Robinson has rightly contended (*Essays in the Theory of Employment,* p. 100) that the regulations relating to the Unemployment relief in Britain produce definitely harmful economic effects. The Regulations relating to the receipt of a dole prevent the recipient from occupying themselves as usefully as they can, for the condition precedent to the receipt of the dole is that the unemployed during normal working hours, " must sit at home doing their best to appear, capable and available for the work that they cannot find in their normal trades." Though moral arguments may be advanced against blind-alley occupations, such employment by maintaining spending during short periods may have on the whole a tonic effect on consumption.

The possibility of using taxation as a corrective of the trade cycle changes should be carefully explored. Here again treasury orthodoxy must disappear and a new policy is called for. Reserves of Joint-Stock Companies, for example, are taxed at a more or less uniform rate during periods of prosperity and Depression. A trade-cycle-conscious administration would do well to free company reserves in whole or in part from income-

tax during depression periods; this exemption might be abolished when prosperity returns.

Though Mr. Harrod has not suggested the abolition of all income-tax, during depression periods, he believes, that as in the case of public works, it is desirable that remission of taxation should be quick and timely, so that it may be reflected in the increased purchasing power of the public. Remission of taxes which fall upon the poor would be particularly beneficial in this direction. The abolition of super taxes is not likely to increase appreciably consumption, for as already pointed out only the inclination to save may become more pronounced. If the wealthy only hoard more, real activity will not be given a stimulus; even if the money is not hoarded, it may be used for speculation in commodities. The consumer of agricultural produce will find then, that the prices have gone up, while the producer of manufactured goods will realize that his profit margin is shrinking as the prices of raw materials have gone up, though in the long run producers of raw materials will enjoy increased buying power, "The immediate effect of this shock-tactics will be dislocation." (Vide *Future of Monetary Policy*.)

Public works would therefore seem to be much more important, though, even there repercussions would vary as between countries, being influenced to a large extent by the economic structure of the country. (Professor Clark has calculated that the time interval between income and spending is very short in the U.S.A., partly due to the high-pressure salesmanship in that country.)

I would emphasise here incidentally the apparently strange, but nevertheless beneficial (subject however to all the undesirable effects, stressed by students of financial ethics) effects of public works in all countries where the capital market is organised under stock exchanges. The activities of such an exchange make at once for a high level of capital construction and a high level of consumption; only such exchanges must be controlled either by men imbued with a high sense of honesty or by the state. It is doubtful whether a rate of interest however low would exert such a powerful influence over investment and consumption, even assuming the banking system in a closed economy is able to achieve and maintain such money conditions.

Apart from the Government, railways all the world over, are consumers of a variety of commodities and their policy therefore, must be influenced by trade cycle consciousness, and be in tune with trade cycle changes which are inevitable under our existing system of production even in closed economies.

Apart from regulating their capital programme, in the heterodox manner, I have suggested with reference to Government expenditure, I will suggest a plan of graded rates to meet promptly and to compensate for the fluctuations in the ordinary demand for commodities. Once the imperative necessity of flexibility in railway rates is recognised, to make up for the decline in ordinary individual spending, and once railways come to realise, that an increase in rates might as easily be achieved as a decrease under conditions that were justifiable, they would be able to mitigate the swings of business activities. The degree to which such a policy can be pursued would of course vary between countries, but it is undeniable that such an experiment would be of assistance to the achieving of economic stability. (*Vide* my paper on "Some Methods for increasing Railway Revenue" in the *Indian Journal of Economics,* April 1937.)

TRADE CYCLE AND ITS REMEDIES

BY

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The nature and the causes of the Trade Cycle are not so important as the remedies for it. In our attempt to maintain optimum trade and business, the remedies are more important than the causes.

The remedies usually suggested for trade cycles are either palliatives or they are in the nature of business insurance. For instance, unemployment insurance has been suggested as a means to minimise the grave evils that follow from it on the life and efficiency of the labourers. Various schemes have been devised in different countries to provide for unemployment insurance. Such schemes do not increase the total volume of employment in the country. They only mitigate the sufferings of the people when unemployment actually overwhelms them. As such it is not a cure—it is merely a palliative.

Business Forecasting.

Business forecasting through "business barometers" has also been suggested in the western countries. It is a method in insurance. It does not seek to *prevent* a trade cycle at all. It merely wants to set the danger signals in advance so that industry may get time to prepare and guard against the cyclic cyclone when it comes. Since we cannot prevent its coming we must keep ready to face it when it comes. Reliable statistical data—like the Harvard Business Barometer—showing the indices of business activity (*e.g.*, trade, employment, prices, bank deposits, bank clearings, money rates, etc.) can give fairly good guidance as to the prospective economic conditions in the near future. It gives fairly reliable business forecast on which producers can plan in production.

The Royal Economic Society in London in collaboration with The London and Cambridge Economic Service publish from time to time very valuable reports on current economic conditions. These reports give the index number of production in all

important commodities, the indices for stock and share prices money rates, new capital issues, bank clearings, bank deposits, discounts and advances, wholesale prices, wages, imports, exports, industrial outputs, shipping, railway goods traffic, unemployment, stocks of staple commodities, values of building plans approved and a number of other important items which afford very valuable guidance as to probable economic conditions in the near future. The cost of living index and the indices prepared by the Board of Trade or Bureau of Labour or the Ministry of Labour are also very valuable. All these afford valuable aids to business forecasting and they are of great help in anticipating trade cycles.

Rationalisation.

Eliminating the wastes in industries is an important factor in stabilising business. In spite of the application of scientific methods in industry, the preventable waste in it is still enormous and there is considerable room for improvement. Industry is, roughly speaking, producing from 50 to 60 p.c. of what it is capable of doing. There is no virtue in mere waste. There is an enormous scope for rationalisation in industry all round. Its importance cannot be neglected.

Elimination of the trade cycle—either wholly or partly—is a splendid ideal if only we knew how to do it. Complete elimination is impossible to achieve. But by levelling down the booms and by levelling up the slump we can go far to insure a fairly steady level of trade and business activity in the country.

The under-consumption and over-saving theory of trade cycles is largely accepted by socialists and social reformers who find in them a scientific basis for their attacks on capitalism. The remedies generally suggested by them to meet the evil often run on political and party lines. But apart from them, there are other remedies suggested on purely economic grounds.

Future of Capital.

A fall in the rate of interest is expected to check excessive savings and bring about a more balanced ratio of saving to spending. A No-Saving System on the basis of a new economic order—where all business will be owned by the state—has been suggested by some as the best solution of the problem.[1] The future of interest has now become a complex problem in economics. With socialism attacking capital on the one hand and with

[1] C. M. Garland, *Depressions and their Solutions.*

the problems of monetary stabilisation on the other, its future has become very uncertain. As Robinson has humorously remarked[2] "In the present age, any government which had both the power and the will to remedy the major defects of the capitalist system would have the will and the power to abolish it altogether, while governments which have the power to retain the system lack the will to remedy its defects."

A better distribution of wealth and income—as between the rich and the poor—is suggested as the best means to correct the evils of the present system. The gap between the rich and the poor is increasing daily. It neither makes for economic efficiency nor for social repose. The Socialists propose to correct the maldistribution of wealth quickly and extensively by heavy taxation of the rich. "Soak the rich" is a new policy in taxation that is suggested as the best means of relieving under-consumption and checking over-savings.

Re-organization of industries on socialistic lines has also been suggested to bring about the much-needed co-ordination between the loose and independent units of production. It is not clear, however, how the mere replacement of private enterprise by state socialism or of the private entrepreneur by a government official will bring about a better capacity to forecast the course of commerce or the trends of trade. Further, if we scrap capitalism are we sure we are going to provide a better substitute for it? Can we replace it by a better and more efficient system? There may be very good reasons for modifying the system but let us be clear of cant and be sure of the grounds on which we want to overthrow it. Does it deserve a funeral merely because some of its supporters have been foolish, some of its adherents have been stupid or selfish or—as Mrs. Robinson has pointed out[3]—some of its economists have talked nonsense about it? Durbin has suggested[3a] that the excess capacity in the capital-making industries should be allowed slowly and painfully to disappear and we should take great care not to recreate it. But all these remedies are bound to be slow in action and by the time they are effective mischief is already done and enormous economic wastes have already taken place. Further, it is extremely doubtful how far some of these socialistic remedies will really achieve their purpose.

2 *Economic Journal*, December 1936, p. 693.

3 *Economic Journal*, June 1936. p. 302.

3a Durbin, *Purchasing Power and Trade Depression*.

Maximising Purchasing-Power.

Keynes[4] thinks that the wisest course is to advance on both fronts at once. " Whilst aiming at a socially controlled rate of investment . . . I should support at the same time all sorts of policies for increasing the propensity to consume." The best way to remove under-consumption would be to increase the purchasing power of the consumers. Various methods have been suggested to achieve this object. We will deal with some of them here.

(*i*) Fall in prices would be the first and easiest way to stimulate consumption—though, it must be pointed out that purchasing power, by itself, is a thing apart. It depends on price levels but it does not lie *in them.* That explains why, during the recent world-wide economic depression the heavy fall in prices could not stimulate purchasing power sufficiently or early enough to make a real impression on the depression.

(*ii*) It is necessary to finance the consumers so as to sustain or increase their demand. It is necessary to reinforce the purchasing power of the public so as to maintain an even and steady pressure of demand on industry at all times. That will help us to maintain optimum production in the country. It has been suggested that the payment of higher wages or at least the maintenance of the existing level of wages at times of depression would go a great way in removing under-consumption. The biggest source of purchasing power in the country is the general wage bill. Wages are almost wholly spent on consumption goods and the elevation of the wage level would restore the balance and fill the gap created by under-consumption. It will check the tendency to over-saving and under-consumption on the one hand and the short-circuiting of purchasing power on the other. The consumer's ability to buy must be reinforced and strengthened—maximised as far as possible—so as to expand the market for consumption goods. The necessary purchasing power must be injected into the consumer so as to revive the economic activities in the slump.

But the plan is not entirely free from difficulties. Artificial increase in wages would force an increase in the cost of production which ultimately must be recovered from the consumers in the shape of higher prices. This will largely counteract the benefit of higher wages. A higher money-wage does not necessarily mean a higher real wage.

[4] Keynes, *General Theory of Employment*, p. 325.

Instalment Buying.

(*iii*) The extension of the system of instalment buying so as to increase the purchasing power of the community has been suggested as an important remedy. The consumer is financed by credit and he can therefore satisfy his needs immediately and pay for them slowly and gradually. This system has greatly expanded in recent years in almost all countries—especially in the motor and the building trades. It is said that in the U.S.A. the volume of retail sales on the instalment plan in one year came to 4 billion[5] dollars in automobiles, 3 billions in domestic equipments and 3 billions in houses.

This system, no doubt, enables industry to sell much more than what it otherwise could do. It thus helps considerably at times of industrial depression. It encourages demand and expands markets. Properly controlled, it acts as a powerful stimulus to trade. Normally, consumer's credit need not be more dangerous than producer's credit. The consumer gains in the same way as the producer does when a commercial bank gives credit to the latter. This system has now become an indispensable part of modern trade. It gives greater stability to production and encourages large-scale production when both the producers and the consumers get the benefit of increasing returns. It is certainly better to give credit to the consumer to clear off the stock of finished goods than to give credit to the producer to dump further goods on the market which he cannot sell. It also enables the producer to acquire machinery and other capital goods more easily and thereby improve business much earlier than he could otherwise do.

Its Limitations and Defects.

But this system has its limits. It does not really increase the purchasing power of the consumers. It only spreads it out and anticipates it. The mortgage of income in advance will gradually limit or exhaust future purchasing power in the community. Always anticipating the income and living on it creates a fatal propensity to extravagance and living beyond one's means which is fatal to a planned and methodical life. People are tempted to buy goods for which they have no real need merely because they can be had for a small cash down. Most of the things are destroyed before the debts on them have been paid. Living perpetually on debt is bad policy, bad economics and bad

5 A billion in America is different from our definition of it. It is equal to unit followed by nine zeros.

business. It forces up artificially the standard of living which cannot be permanently maintained. A high standard of living is desirable but a spurious standard built on gambling is positively mischievous. It destroys the telescopic faculty in the individual. Like narcotics, it drugs the family with a false standard of life and prestige. It is a very bad training for the younger generations who are about to enter the world. It leaves a trail of misery behind when either the false standard has to be foolishly maintained by continual debt deficits and deferred payments or the family is forced to recede from its artificial position of limelight and drop down to a lower but more real standard of living. The system is positively dangerous when very long credits are granted with inadequate initial payments or when shorter credits are granted without any initial deposit at all. In many cases, the traders have suffered heavy losses through bad debts. Their capital is locked up for long periods. The consumer has to pay for it in higher credit prices although he probably does not realise it. Credit prices must be higher than cash prices because the credit has to be paid for.

Further, the system cannot be adopted in all cases. It is safe if applied to durable goods which will outlast the instalments. It would be risky where the reverse is the case. It cannot be safely applied where the commodity is consumed in its use.

Lastly, the system will be of little help in a slump when its services would be mostly needed. Because at such a time, the volume of instalment sales will automatically decline and may even evaporate altogether.

Stabilisation of Employment.

Stabilisation of employment is an important factor in mitigating the effects of trade cycles. It has been suggested that a reduction of working hours will reduce unemployment and thereby increase the purchasing power of the labourers. That may be true but it is not the whole truth. Those who suggest it take no account of the fact that with a shorter working-day the existing level of wages may not be maintained. If the existing rate of wages is reduced what would be the net gain in purchasing power? The number of labourers will increase no doubt but their *per capita* wage will go down. There may be a slight gain in purchasing power—on the balance—but it cannot be as much as it is anticipated by the supporters of the scheme.

Heavy tariffs on foreign imports so as to oust the foreigner from the home market or to under-sell him has also been suggested. The advocates of this policy talk big about " exporting

unemployment" by high tariffs but this policy is a part of the crude old protectionist doctrine which was killed and buried long ago but which—like the king!—never dies. The remedy may apply to a particular country—so long as it does not provoke retaliation. Even then the visible effects must be balanced against its invisible effects which are more important in the interest of total employment in the country. As a general world-wide remedy the policy is useless. Economic nationalism—since the war—has pursued this short-sighted policy relentlessly in every country but with what result? The world-wide economic depression will answer for it. Such a policy will only aggravate the trouble still further.

Composite technical training to labourers will be helpful so that occupations may be inter-changeable in times of depression. If one branch of a business has to be curtailed or if one industry has to be reduced, the men squeezed out may then be easily absorbed in other branches or other industries.

Other minor measures may also be suggested. Novelties or new fashion hints may be held back from the market in periods of boom and released when trade is slack. Manufacturers can produce for stock in slack periods so as to minimise reduction in output and employment at such times. Orders may be canvassed for long in advance so as to space out employment evenly over secular periods and special terms may be granted to customers in such cases.

Rationalisation of Money.

A rational use of money is one of the most potent instruments in dealing with trade cycles. Various suggestions have been offered by eminent economists for the rationalisation of money. Bimetallism, symmetallism, monometallism, managed currency, neutral money, free money, compensated dollar and a host of other schemes have been offered for a rational monetary policy which would stabilise prices and eliminate the cycles. The fluctuations in business are largely due to the instability of price levels. Stabilisation will present undue and uneconomic business expansion under the lure of high prices in a boom. It will also eliminate the discouragement to business when prices are low in a slump. Manipulation of the currency in circulation or a managed currency have been suggested as the easiest way to it. A trade cycle—as Pigou points out—always comes in a money garment. Fisher's scheme of a compensated dollar—to be adjusted automatically by reference to an index number of prices—is another attempt at rationalisation of money but unfortunately

it does not command general acceptance. Keynes, for instance, points out[6] that "its use and wisdom is open to doubt. Fisher's methods may be adopted in the case of secular trends in gold value but not with the short-period oscillations of the credit cycle."

The idea of a neutral money has rapidly gained in popularity in recent times. Money, it is held, should be strictly neutral in building up the structure of price. Its neutrality must be above suspicion.

Gesell's Free Money.

Gesell's plans for a free money aim—like Fisher—at the rationalisation of money. Gesell held that hoarding of money was responsible for industrial depression. He therefore proposed a system of free money which would eliminate the trade cycles by preventing the hoarding of money. His free money cannot be hoarded because it would lose in value by hoarding. Wealth hoarded in the shape of money is not perishable. Hence the lender of money can charge interest for it. He can even refuse to lend without much loss to himself. Where money is exchanged for goods, the owner of money is always at an advantage compared with the owner of goods as the offer of money can be delayed but not the offer of goods. In a market, the actual supply of commodities once produced cannot be withdrawn. But the demand for goods—which comes from money—is not fixed but variable. Gesell proposed to make money perishable like other commodities so as to deprive the owner of money of his unfair advantage. His free money[7] will consist of currency notes which will depreciate in value—at the rate of about 5 per cent per annum—every week. To avoid the depreciation, the note must be stamped every month at a fixed rate and at the end of the year the old issue will be withdrawn and a new one will be issued in its place. The owner of money—now owning a perishable product—will be far more anxious to exchange it than he ever had been before. Gesell thinks that his free money will improve trade, reduce interest to zero rate and—combined with suitable fiscal and banking policies—eliminate trade cycles. He would stabilise the price-level by regulating taxation. When prices tend to fall, taxation will be remitted and the budget will

6 Keynes, *Monetary Reform*, p. 187.

7 For a detail account of Gesell's Theory, *vide Cole—What everybody wants to know about Money*, pp. 385—101 and Keynes, *Gereral Theory of Employment, Interest and Money*, p. 353.

be financed out of the new money. If prices tend to rise, taxation is increased and some of the money is withdrawn from circulation.

These schemes at monetary reconstruction cannot be discussed more fully within the limits of a paper. Gesell's scheme has some apparent difficulties but it is blessed by Prof. Fisher and even Keynes gives it his guarded approval.[8]

Manipulation of the Discount Rate.

A conscious and deliberate control of discount rates by the Central Bank has been suggested in order to limit the undue extension of credit. The power of the bank either to create or to withhold credit may be utilised to prevent excessive fluctuations of trade activity. After the industrial equipment and production in a country is fairly stabilised, the bank should be careful in granting fresh accommodations. It should demand security more strictly and, if necessary, should raise the rate of discount. It can nip in the bud an incipient boom by a high rate of interest which would cool down the enthusiasm of the most misguided optimist. It can check speculation, the needless waste and unhealthy extensions of business in a boom so that if and when a slump comes later on, the curve of depression will be less steep and it will be less violent in effect than what it otherwise would be. It can level down the boom and thereby reduce the violence of the slump. Keynes points out[9] that a high rate of interest is much more effective against a boom than a low rate of interest against a slump. This however may not hold good at all times. For instance, when prices are steadily rising, borrowing becomes quite an easy job. A high rate of discount cannot effectively check borrowing as long as prices are soaring *and they keep soaring* because exceptional profits can easily be made at such times. During the War (1914—18) the average rate of interest was 5½ per cent but as prices were very high, the market could easily have paid 15 to 20 per cent for accommodation. A rise in the discount rate at that time could not possibly check borrowing unless the rate was raised to unprecedented heights.

Barring such exceptional cases, however, a low bank rate encourages commercial borrowers and thereby it expands bank credits. Supply of money is therefore increased and prices rise. A low bank rate will thus be useful when trade is slack and a slump has started. It then increases the facilities of accommodation and easier money conditions help in the revival of business.

8 *General Theory of Employment*, Keynes, p. 357.

9 Keynes, *General Theory of Employment*, p. 320.

On the other hand, a high bank rate, normally, discourages borrowings. Bank credit is contracted, the supply of money is reduced and prices fall. By open-market operations, the Central Bank can buy or sell securities to regulate the supply of money and thereby stabilise price levels. When prices tend to rise, the Bank can raise the bank rate and sell securities in the open market. Thereby, it withdraws money from circulation and forces up its value. Prices fall. When prices tend to fall, the Bank will lower the bank rate and buy securities. Thereby it will increase the supply of money and prices will therefore rise. By this alternate process, prices will be stabilised. This has actually been done in recent years on an extensive scale by the Federal Reserve Board in America with satisfactory results. But this method—as Harrod points out[10]—has some difficulties, *e.g.*, how far can the Central Bank continue the open-market operations if the borrowers are not responsive? How far can it expand credit if the public is reluctant? What proportion of its assets can it safely hold as investments? The security of its depositors must be its paramount consideration. Will it get a government guarantee? What about foreign exchange? Lastly, if the open-market operations are limited to very short-dated securities, they might affect the very short-term rate of interest but they will not at all affect the secular rate of interest.[11]

Even Spacing of Public Works.

One more remedy suggested to meet the depressions is important. Government, Railways and other public bodies—which can afford to take long views—can even out employment by properly spacing their activities. Large constructions of public works may be undertaken in times of depression and may be restricted in times of boom. Public works and other capital development from public funds should always be restricted when private business is good and expanded in times of depression when private business is bad. They should be held up in periods of prosperity and pushed up in times of depression. This long-range planning of public works will give them the benefits of cheap capital and will give the community the benefit of more even employment. It will thus mitigate the tragedies of depression. It will greatly help in levelling down the booms and levelling up the slumps. It may be noted that in some of the

10 Harrod, *The Trade Cycle*, p. 176.

11 Keynes, *General Theory of Employment*, p. 197.

states in U.S.A. long-range planning of public works is now provided by statute.

Some big industry or industries in the country, *e.g.*, railway construction or the building trade should be used as the balance-wheel of industry under which orders should be suspended—as far as possible—until trade is depressed when it will reap the benefits of cheaper costs on the one hand and space out employment more evenly on the other. The balance-wheel of industry will evenly balance employment in times both good and bad.

THE NATURE AND CAUSES OF TRADE CYCLES

BY

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The Nature of the Trade Cycle.

The conception of a trade cycle is nothing abnormal and yet it is one of the perpetual mysteries of Economics. Human civilisation itself moves in a cycle and over long periods there is a regular cyclical movement in many other aspects of human life.

The economic mechanism of the modern age is marvellously complex and remarkably delicate. Like all such mechanisms, it is liable to go out of tune from time to time. It cannot possibly work permanently and efficiently without an occasional irregularity or disorder. The delicate mechanism of production and exchange is bound to go out of gear at times and no human ingenuity can possibly hope to insure against it.

With world-wide markets and international division of labour, with an unlimited number of commodities which are being daily produced for the satisfaction of human wants, with millions of producers scattered wide over the continents—each producing for the rest of the world—*not to order* but *in anticipation of a market*—not on actual demand but on hypothetical estimates, with consumers varying so widely in number, tastes, habits and standards of living, with fashions changing almost from day to day and with increasing inter-dependence amongst the different parts of the world, it is no wonder that our delicate trade mechanism shall go out of order from time to time.

A trade cycle is not confined to any particular country. It exists everywhere. England—largely dependent on foreign trade and relying chiefly on foreign markets for her food supply and raw materials on the one hand and for marketing her manufactured goods on the other—is peculiarly liable to industrial fluctuations whenever her foreign markets are threatened. On the other hand, in India or in the United States—where foreign

trade is a very small part of the total trade—the phenomenon of a trade cycle is equally present.

In the modern world, a temporary local shock at one place now quickly spreads itself in concentric circles over the whole world. A risk or a danger to one spreads itself into a danger for all. A slump or a boom in one industry or in one country quickly tends to produce a slump or a boom in others. The workers in one industry or in one country create the demand for the products of other industries or other countries. It is the reciprocal inter-dependence of the units which constitute the harmony of the whole. It produces a regular synchronism in a slump or a boom in all the industries at particular times. The synchronism is not a mere coincidence. It looks like the part of a plan in the natural order of things and it is regulated by the harmonies of nature. There is a further remarkable tendency for the good and the bad times to alternate with each other and—what is more—they alternate with a certain regularity. But they do not repeat themselves in every detail. The details vary but the cycle goes round and round in rhythmical waves. No two trade cycles are exactly identical in all respects. A boom carries with it its own correctives while a slump carries with it its own cure.

These cycles are marked off from each other by crises which involve great economic waste and which in violent shocks and jerks put industry and trade back on its normal alignments. It is this regular and rhythmical oscillation of good and bad times, of expansion and contraction of trade and business—each following the other in a series of waves that constitute a normal trade cycle. It is really one aspect of the great law of nature permeating through the entire universe under which the good always follows the bad, progress always follows decay, light always follows darkness and life always follows death.

Periodicity of Cycles.

Various estimates have been made as to the exact periods of these cycles. Joseph's seven fat years of plenty followed by seven lean years of famine—mentioned in the Old Testament—started the search for a cyclical formula. Some economists (*e.g.*, Jevons) put it at 10 to 12 years as the normal period of a cycle during which the wheel would come full circle. In the last century, the crises occurred at fairly regular intervals, *e.g.*, in 1815, 1825, 1837, 1847, 1857, 1866, 1873, 1878, 1890 and 1900. There are others who suggest that 7 to 8 years would be a more correct estimate of the period.

It would really be futile to lay down any formula that would apply uniformly in all cases. Any abnormal condition like a war, a famine, or a political upheaval may upset the period and make it either longer or shorter than the accepted period. The regularity that was noticeable in the last century has vanished from view due largely to the complications of the Great War. The idea of periodicity is often unduly exaggerated and it cannot be definitely established because under the modern competitive system conditions change with wonderful rapidity. The idea of periodicity never was and need not be an essential condition of the Cyclical Theory. The cycle nowhere and at no time had a uniformly regular or constant period. We can concede that there is a regular sequence of events which constitutes a trade cycle. But like a circle it may be big or small. Where circles vary in sizes, it is only natural that their arcs or circumferences must also vary. It would take the wheel varying periods to go round the circle according to the size of the circle itself. Hence it is really impossible to postulate for an uniform and exact period for a trade cycle. As a matter of fact, there are many who *deny* that there is really a trade cycle when the periods vary so much and when the rates of increase or decrease in trade and business are so uneven, erratic and haphazard. Some of the waves that follow each other are long and big while the others are short and small.

The Character of a Cycle.

A trade cycle—according to Mitchell[1]—passes through four definite stages, *viz.*, prosperity, recession, depression and revival. Business continually fluctuates from one extreme to another. An essential feature of the trade cycle is the cumulative nature of a boom or a slump. It continually moves in a spiral —from one end to another, from a boom to a depression and *vice versa.* When a depression once starts, producers are forced to curtail the level of production. This causes unemployment which again leads to under-consumption and restricted demand. These factors aggravate the depression and so the vicious spiral goes down and down. On the other hand, when a boom starts, production expands automatically, employment increases, purchasing power is enlarged and demand is stimulated. These factors stimulate the boom still further and the spiral goes up and up. Thus, it is the nature of a trade cycle that at one moment the bad tends to become worse or the good tends to

1 *Business Cycles*, Mitchell.

become better. Then comes a time when the forces pushing it upwards or pulling it downwards gradually lose their strength and exhaust themselves until they are replaced by forces operating on the opposite direction. When these latter forces again reach their maximum strength a set of opposite forces come into play again.[2]

After a boom has continued for some time factors automatically operate to turn the tide. Rates of wages go up. Cost of production increases. Small wastes creep in unnoticed. Scarcity of capital pushes up the rate for money and the rate of discount. This affects the profits of the producer. A feeling of optimism had led the producers to produce much more than what they could profitably sell. The heavy industries producing industrial equipments produced on a large scale. A huge structure of credit was built up to finance the whole process and then a sudden shock somewhere shakes credit so completely that a panic starts and the liquidation of the inflated credits ends in a crisis.

A remarkable feature of the trade cycle is that, in spite of the cumulative forces operating each way, a depression leading to a deeper and deeper depression does not destroy trade and business altogether. On the other hand, after a time, trade and business turn round the corner and they actually revive. The vicious spiral does not end in a total collapse of trade. Similarly, a boom leading to a greater and greater volume of business does not end in permanent and stable prosperity. After a time, trade and business turn round the corner and they begin gradually to decline and so the spiral does not end in permanent prosperity.

This shows that trade and business are in a state of perpetual motion—moving ceaselessly from one end of the spiral to the other. What gives it this perpetual motion is explained clearly in the psychological theory of Prof. Pigou—with which we deal below. That theory explains what is it that pushes up trade when it is at the depth of depression and again pushes it down when it is at the peak of prosperity.

Theories of Trade Cycle.

Economists have long looked for the real reason behind these cyclical movements and various theories have been advanced to explain them. Some time back an enthusiastic German economist collected about 230 different theories on trade cycle. Jevons had advanced his famous Sun-spot Theory which held that

2 See Keynes, *General Theory of Employment*, pp. 313—14.

the periodic recurrence of crises was due to the periodic recurrence of sun-spots at intervals of 10 or 12 years. Sun-spots affect the weather and thereby influence the harvests. He attempted to establish a correlation between trade cycle and the cyclical appearance of sun-spots. Sir William Beveridge put forward[3] a modified view of it but these climatic theories have now been practically given up. They are no longer accepted as a rational explanation of the trade cycles.

The Monetary Theory of Cycles.

A prominent school of thought holds that the real reason for the trade cycle and crisis is monetary. It is over-issue and expansion of credit beyond the needs of trade and industry that leads to crisis. Trade cycles—according to it—are due to the slender basis of credit and to fundamental defects in money and banking. Keynes also offers[4] a monetary explanation of cyclical depressions. Fisher[4a] also holds that a trade cycle is a purely monetary problem. The cause and the remedy of a trade cycle lie in factors relating to money.[5] This theory holds that money affects prices and prices affect trade, that fluctuations in the quantity of money and in the velocity of its circulation—relative to the volume of trade and business—cause fluctuations in the general level of prices which lead to the cyclical movements in trade. Changes in the volume and velocity of money naturally influence the length and the intensity of the cycles. Judicious control of the monetary factors may go far—if not to remove trade cycles at least to moderate them. Thorp and Mitchell have analysed the long-period secular fluctuations in England and in the United States over a long period of 130 years and they found that in both countries five periods of alternately declining and advancing price trends were clearly established.[6] From 1790 to 1814 wholesale prices rose. From 1814 to 1849, they declined. From 1849 to 1865 (in the U.S.A.) and to 1873 (in England)

3 *Economic Journal*, December 1921.

4 Keynes, *Treatise on Money*, Vol. II and *Monetary Reform*. Also, Keynes, *General Theory of Employment, Interest and Money*.

4a Fisher, *Stabilising the Dollar*.

5 Pigou does not agree. He thinks that the forces that underlie a trade cycle need not necessarily reside in money. The fundamental factors of fluctuation lie more in trade and industry than in money and banking. Monetary influences are no doubt important either to intensify or to modify the effects of a cycle but they are not the sole causes of such fluctuations.

6 *Business Annals*, Thorp and Mitchell, p. 66.

prices rose again. Then up to 1896 prices declined in both countries. From 1896 to 1920 prices rose again. The National Bureau of Economic Research has worked out the following ratios of years of prosperity to years of depression for the above periods as shown below:—

Years of prosperity per year of depression (England)	Prices	Years of prosperity per year of depression (U.S.A.)
1790—1815 ... 1·0	Rising	1790—1815 ... 2·6
1815—1849 ... 0·9	Falling	1815—1849 ... 0·8
1849—1873 ... 3·3	Rising	1849—1865 ... 2·9
1873—1896 ... 0·4	Falling	1865—1896 ... 0·9
1896—1920 ... 2·7	Rising	1896—1920 ... 3·1

The result shows remarkable uniformity and establishes the close connection between secular price movements and business cycles in different countries of the world.

Various solutions have been offered so as to control illegitimate expansion of credit by rational manipulation of the discount rate, deflation, rationing of credit and strict discrimination between different classes of borrowers. We deal with them in detail later on—in a separate paper—on the Remedies for Trade Cycles. We need only point out here that the monetary theory does not offer a satisfactory explanation in short-period cycles where the volume of money does not decline until *after* prices have started falling. Conversely, trade revival generally starts even before the level of prices has appreciably risen.

The Over-Production Theory.

A large number of economists hold however that a trade cycle is a world-wide phenomenon and it cannot therefore be dependent on monetary factors operating in individual countries. They think that trade cycles originate in blind competition between independent and widely scattered producers who produce in anticipation and in advance of demand and therefore produce much more than is really necessary. Each producer works independently of the rest and each one hardly knows how much the other fellow is producing. New inventions, changes in fashion, tastes and habits of the people and political events—all

these may create local over-production in any particular industry at any time. In such an unplanned and un-coordinated system of mass production supply shoots up beyond demand at certain times not as a result of speculation but as a result of pure miscalculation. In other cases, a sense of false optimism may also lead to over-production. This maladjustment between supply and demand is primarily responsible for the recurrence of the trade cycles. The surplus of productive capacity in industry leads to over-production and the consequent losses in over-production—*i.e.*, the production of more consumable goods than what can be sold at a profit—lead to a slump and the slump leads to a crisis and the cycle completes itself. Competitive industry based on a system of credit is bound inevitably to lead to an unstable equilibrium in production.

The Psychological Theory.

Prof. Pigou has advanced[7] a new theory which does not altogether deny the influence of monetary and banking factors on the trade cycle but which lays greater stress on the psychological factors of optimism and pessimism in them. The theory holds that the state of the business mind is the primary cause of the trade cycle. When trade is good, there is a feeling of optimism all round. Business expands and prices rise. Production is encouraged. On the other hand, when trade is bad pessimism prevails, business contracts and prices fall. Production is discouraged. The great leaders of industry suffer from an unstable mental equilibrium. Like the pendulum of a clock, their minds alternate between fits of optimism and pessimism, between over-confidence and depression. It is the reaction of these mental conditions—the emotional aberrations or, as Pigou calls it, the swinging of business judgment—that leads to a boom at one time and a slump at the other. As Pigou has beautifully expressed it—" The attitude of these persons towards the signs of the times does not remain constant but varies from period to period between errors of optimism and errors of pessimism. In good times, they become over-confident, exaggerate their prospects and expand their investment further than a true forecast would warrant. After a while, when the goods are ready for the market, they find that the demand is less than they had looked for. They suffer losses and these losses react on their minds causing them now to under-estimate the prospects of

7 Pigou, *Industrial Fluctuations*, Part I, Chap. 5. Vide also Pigou, *Is Unemployment Inevitable?*, pp. 96-97.

investment."[8] If their minds moved independently of each other, most of their motives to action would mutually cancel each other out. This would minimise industrial fluctuations and aggregate industry would not vary very much. With a very large number of producers, their errors of judgment will cancel each other out on the balance.[8a] But unfortunately, their minds do not work independently. They work in a team—from one end they jerk to the other. It is the psychology of the crowd movement that operates here. Mental conditions are infectious while the businessmen live close together and they meet frequently in their trade or business organizations. Trades are so inter-dependent that ideas pass with electric speed. As Henderson points out[9] there is a subtle sympathy which unites the entire business world and business moods move in single waves over wide areas leading to trade cycles. The psychological factors are based on ignorance and on inadequate appreciation of facts. It can be controlled by better diffusion of knowledge regarding business conditions.

This theory however fails to explain the fixity in cycle periods. It also fails to explain why and how the factors turn from good to bad and *vice versa*. If prices can be stabilised through monetary or credit reform, the effects of optimism and pessimism would be largely corrected and eliminated. The theory does not explain why *demand* changes from time to time. Thus it fails to give a complete explanation of the trade cycle. It may, however, be used to supplement the other theories—analysing, as it does, some of the most elusive factors on which the human minds react.

The Short-Circuit Theory.

The short-circuit theory holds that over-production and under-consumption are due not so much to defects in distribution of wealth as to a manifest flaw in our industrial and commercial system. So long as the purchasing power is used firstly to induce the production of finished goods for sale and then to buy them out, *alternately*, there is no possibility of an all-round over-production. But if this alternation is upset, if purchasing power is used twice in succession to induce the production of finished goods for sale, then more goods will be produced than there is

[8] Pigou, *Is Unemployment Inevitable?*, pp. 96-97.

[8a] Harrod, *The Trade Cycle*, p. 45.

[9] Henderson, *Supply and Demand*, p. 25.

purchasing power available to buy them. Suppose a man earns \$1000 in a motor factory and as a result of his labour, suppose, a motor-car is put on the market for sale. The producer must charge a minimum price of \$1000 for the car in order to recover the bare cost. If the man chooses to buy a car with his \$1000, the car will be taken off the market and, to that extent, it relieves congestion on the market. But if, instead of buying a car, the man invests his \$1000 in a firm making, say, machinery the result is vastly different. The car, for the time being, is left on the market without a buyer whereas more machinery—at a minimum price of \$1000—is put on the market for sale. Thus, there is a \$1000 car and \$1000 machinery in the market—both competing for *one* purchasing power of \$1000 paid out to the employees in the machine trade. That purchasing power can only buy one of the two things—but it cannot buy both. Thus the net result is that the man by using his purchasing power not to buy a finished good but to induce the production of more finished goods for sale has brought into existence \$1000 worth of goods for which, clearly, there is no purchasing power available in the market. Purchasing power is thus short-circuited. More goods are brought into the market for sale without taking any out of it.[10] When companies use undistributed profits not to pay dividends but to extend production or when they borrow additional working capital in debentures for the same purpose, purchasing power is similarly short-circuited. Purchasing power is always floating and oscillating between the industry and the consumers. When it passes from the community to the industry for the production of further goods without first taking off the market what is already there, there is over-production. Similarly, if the monetary circulation is to be increased, it will make a lot of difference if the increase is to go to a manufacturer who uses it to produce more goods or it is paid in public works which increase purchasing power without producing more goods for the market.

Thus, short-circuiting leads to all-round over-production and industry offers more goods for sale than there is purchasing power available to drain them out as fast as they are produced.

Unfortunately, we have no statistical data to show how far purchasing power is actually short-circuited as a matter of fact. That it does happen cannot, unfortunately, be denied.

10 Cp. *Business Without A Buyer*, Foster and Catchings.

The Over-Saving and Under-Consumption Theory.

Hobson's[11] under-consumption theory of the trade cycle has been more largelv accepted than other theories. According to him, a large part of the total income in the country goes into the pockets of a relatively few wealthy people. They enjoy an enormous amount of socially unnecessary and unearned income—the unproductive surplus as Hobson calls it. This unequal distribution of wealth and of the product of industry is responsible for serious evils. A fall in the rate of interest or a fall in price levels is inadequate check to prevent over-saving. A large part of the surplus value which the labourers help to create does not stay with them. The labourers get much less than their proper share of the product of industry. In the hands of the richer classes, a large part of the surplus value is converted into fixed capital—factories, mills, machinery etc. This unplanned and uncontrolled investment—in its turn—helps to produce even larger quantities of consumption goods. But, as the vast majority of the people are poor, the increased output of goods cannot find profitable markets. The magnitude of savings leads to a dearth of floating capital. A disproportionate use of fixed capital through over-saving and mal-distribution of wealth and incomes brings about an economic malaise. The purchasing power of labourers is reduced due to the scarcity of floating capital. Over-saving and under-consumption thus go together. Industry is naturally depressed when the largest mass of consumers suffer from a lack of adequate purchasing power. Consumption then fails to keep pace with production. As Robertson has pointed out, each week's expenditure in the case of the labourers is governed by the last week's income. If supply exceeds demand, industry naturally stagnates in the inevitable over-production. Production is curtailed and the demand for labour declines. The unemployment figures go up. Prices fall and the trade depression begins.

Thus the over-production of capital goods—relatively to consumption goods—is the primary cause of cyclical trade and industrial fluctuations. An excessive proportion of the national dividend is saved as capital and applied for productive purposes instead of being used for the purpose of purchasing consumption goods. There is an automatic—almost mechanical—accumulation of capital in excess of social needs. The chronic over-saving on the part of the rich leads to chronic under-consumption on the part of the poor. Over-capitalisation in industry brings

11 Hobson, *Economics of Unemployment.*

about the slump. Industry suffers from the choking congestion of unsold or unsaleable goods. As Hawtrey remarks, the contraction of consumer's outlay is primarily responsible for the trade cycle. Spiethoff thinks that crises come because people put their savings too much into industrial equipment and not enough in consumption goods. The dis-equilibria between savings and investment and their effect on price creates a lot of difficulties in industrial planning. Optimum production becomes impossible not because we lack men or lack materials but because we lack markets and that because we lack purchasing power.

This theory holds that there is a proper ratio between saving and spending at any time. An increase in the ratio will lead to congestion and glut in the market. Any disturbance in the parity creates an unstable equilibrium in industry.

Where the ratio of capital to output is given an increase in capital becomes necessary only when the rate of consumption has increased. A decline in the rate of consumption will naturally bring about a decline in the rate of investment. When depression has continued long, losses in business become heavy. The amount of savings invested in business declines. Equilibrium is thus restored between saving and spending and trade revives once again in the usual way.

Schumpeter's explanation of the major movements—which he calls innovations—that cause fluctuations in the rate of investment are well-known. When once started, the wave of innovations gains momentum. The over-investment theory of Hayek is only a variation of this theory.

Criticism of the Under-Consumption Theory.

We can concede at once that the present system of distribution is iniquitous. But it is difficult to believe that under-consumption is the primary cause of the trade cycle. A trade cycle will exist even if wealth is much better distributed than at present. There will be cycles even in Utopia. This theory fails to distinguish between savings and investment[12] and shows an inadequate appreciation of the use and importance of saving (and therefore of capital) in the modern economic life. The huge losses of capital in the Great War had to be made good. The need for capital to develop the backward countries—though it is much less now than what it was before—still continues and it will continue for a long time yet. The efficiency of saving in reducing the cost of production also cannot be ignored. An

12 See *Economic Journal*, June 1935, p. 312.

increased rate of savings may create difficulties but a *constant rate* of saving may be necessary for the maintenance of economic activities in the future. A constant rate—whatever might be its level which must be commensurate with the powers of industry to utilise it—has to be maintained if the future economic structure is to be safeguarded.[13]

A crisis is generally followed by a rise in prices and wages in the early stage. The income of labourers is greatly increased at such a time. Hence their purchasing power is also enhanced at that time. This certainly should reduce the volume of under-consumption for the time being and hence it should act as a self-regulating or automatic corrective to a crisis.

Further, if this theory is correct, then when a slump starts prices of consumption goods should fall *before* prices of raw materials and other producers' goods. But actually, the reverse is the case.

The theory ignores altogether the fact that as against under-consumption in the masses the concentration of incomes in the hands of the upper classes does lead to a certain definite increase in the demand—which however minutely small it may be as compared with the size of mass under-consumption is still something and it cancels—however inadequately it might be—the effect of the mass under-consumption on trade movements. It may be microscopic in size,but it does exist and—in fairness—we cannot afford to ignore it. The demand of the richer classes can never possibly be equal to the mass demand. Its character also will be different. But so long as it exists and grows in volume, is it fair to ignore it altogether?

Further, the extent of under-consumption is probably exaggerated—especially in the case of necessaries where the demand is inelastic and consequently, there is a limit below which it cannot fall.

Further, how far is it really true that all our present troubles are due to excessive investments? It would not be strictly correct to hold as if the equation really consists of total output in one commodity on one side and the total purchasing power on the other. This is never the case. An attempt to solve the two sides of the equation on this basis would be unreal as a solution of the concrete problem that we have to face. We cannot really afford to ignore it. As Lough puts it—" the increasing national income produces an increased sensitiveness and variability in the

13 Durbin, *Purchasing Power and Trade Depression.*

structure of human consumption and that greatly modifies the main grounding of this theory."[14]

We must also note that attempts to increase the purchasing power of the consumers in times of depression are apt to be ineffective. Durbin has clearly explained how the best efforts in that direction might be easily defeated.[15] We must be very careful that in our attempts to increase purchasing power we are not merely chasing our own shadows.

Further, the theory does not adequately explain the rhythmical periodicity of cycles which is one of the important features which need a clear and precise explanation. It fails also to explain why unemployment due to under-consumption does not lead to even greater under-consumption and therefore to even greater unemployment. It gives no rational explanation as to why the process should not go on into deeper and deeper depths into the quicksands of depression. Where does it stop—*and why*? How does it stop at all? What is it that moderates its intensity and limits its extent? Where to draw the line—beyond which depression will not go further? How to draw it? Of course, it will act through reduction in the volume of savings and investments but it is hardly adequate to explain the whole process. Nor can the theory be taken as the sole factor in the determination of the trade cycle. It may be an important factor but it is not—and cannot be—the sole factor.

Conclusion.

The Trade Cycle is the eternal mystery in economics. There is no algebraic formula to forecast it. Its therapeutics still baffles the economists. They cannot offer any single explanation for it which is completely free from doubts. The experts differ among themselves and the layman wonders: There are 230 theories of trade cycles and, in the words of Hawtrey, some of them "help as much as a misprint in the multiplication table."[16] No economist, so far, has succeeded as a peacemaker in the Cycle War. The reconciliation among the various theories has become almost an impossible task. The competition theory of Beveridge, the theory of the High Cost of Construction of Hull, the theory of over-capitalization, the theory of dissimilar price fluctuations of Carver, the theory of declining profit prospects of Lescure, the theory of unlike rhythm of Sombort—all these and a host of

14 W. H. Lough, *High Level Consumption: Its Behaviour.*

15 Durbin, *Purchasing Power and Trade Depression*, p. 162.

16 *Capital and Employment*, R. G. Hawtrey.

others fail to lead us out of the ditch. The eternal mystery remains—it deepens and defies solution. All attempts at correlation and synthesis have so far failed. There is no mathematical formula by which—long before time—we can forecast its approach, measure its intensity, find out its duration and calculate its effects. So far, we have failed to offer a complete theory of trade cycles.

It is not possible for us to eliminate the trade cycle altogether. A trade cycle is a part of the natural order of things —one of Nature's methods to set things right after violent shocks and jerks. It is no use making futile plans to eliminate trade cycles. Even a slump has its uses which are valuable at times —to eliminate wastes, to promote inventions to reorganise business on economic lines and to rescue industry from inefficiency. No country in the world has yet evolved a system of effectively controlling cyclical fluctuations in trade and industry.

Man has—through countless ages—raised a huge and complex economic and industrial system for the satisfaction of his own wants and for the insurance of his own happiness. For long, he thought himself to be the master of the system that he had himself raised. Today he finds that he is merely a victim —and a hopless victim—to it.

INDIGENOUS BANKERS AND RESERVE BANK

BY

R. D. TIWARI.

SUMMARY.

Before the advent of organised joint-stock banks the indigenous banker was the only financing institution of note. Even now he has an important place in the money market. Fairly large number of towns have no bank or branch of a bank, and to them the indigenous banker is the primary source of credit. For the co-ordination of the money market it is essential that the indigenous banker should be directly linked up with the Reserve Bank. Indigenous banker is an essential part of the banking sructure. There is a clear distinction between the indigenous banker and the moneylender. Central Banking Committee has recommended direct linking. Reserve Bank's plea is for indirect linking. There is no case for indirect linking. Conditions of direct linking: 1. The indigenous bankers should have sufficient resources of their own, but the minimum required should be less than that expected from the scheduled banks. 2. They should maintain separate accounts properly audited of their banking business. The aim should be that they should conduct primarily banking business. 3. They should ensure proper publicity of their transactions. 4. They should maintain some deposits interest-free with the Reserve Bank like scheduled banks. For the initial period of five years those bankers whose liabilities do not exceed five times their capital should be exempted from this obligation. This exemption should be extended for further period if required. The advantages derived from benefits conferred must be ultimately passed on to the customers. Other indigenous bankers should be indirectly linked to the Reserve Bank.

Importance of indigenous bankers.

That the indigenous banker has played a prominent part in financing Indian trade since times immemorial has been accepted at all hands. Till the advent of organised joint-stock banks the indigenous banker was the only financing institution of note in this country, and even after the advent of organised Indian joint-stock banks and exchange banks he continues to play an eminent rôle in extending credit to the people. Further, Indian joint-stock banks have not been able to solve the problem of providing adequate agricultural credit, an essential pre-requisite for the sound and efficient organisation of Indian agriculture, on which 70 per cent of the population depends. Banking statistics reveal that out of 2,500 towns, with a population of 5,000 or above,

only about 400 towns have a bank or a branch bank. Thus in large number of towns and in almost all villages the small industrialists, merchants, traders and agriculturists have even to-day to depend solely upon the indigenous banker or the money-lender for their credit requirements. This is not all. Even in those towns which claim a bank or banks the indigenous bankers provide invaluable credit facilities to the people who do not find adequate and timely accommodation with a bank. In other words, the Indian joint-stock banks even if they have their branches in small towns they play 'a very minor rôle in comparison with the private indigenous banker,' as has been rightly pointed out by the Reserve Bank. Moreover, the rates of some of these indigenous bankers do not compare unfavourably with those of the joint-stock banks.

Need for better contact between the Reserve Bank and the indigenous banker.

Only a few years ago when pressing our case for the establishment of the Reserve Bank, we pleaded, *inter alia,* that the Reserve Bank would improve and revitalise agricultural finance in this country, which is the root cause of our present inefficient agricultural technique. We expected the Reserve Bank to establish a special Agricultural Credit Department, which would not merely serve as an apex institution for co-ordinating the activities of the provincial co-operative banks, but help to reorganise the entire system of agricultural credit and make it more efficient and economic. This meant that the Reserve Bank would establish more intimate contact with the indigenous bankers, improve their methods and help them out of their present decadent condition by enabling them to acquire more adequate funds. By placing the indigenous bankers on its approved list and authorising them to act as its agents, the Reserve Bank would make its credit policy more effective, and it will at the same time be strengthening the credit and position of the indigenous banker. The contact between the city and the country market will become closer and the use of bankers' acceptance will be more popular. Under such circumstances, the Reserve Bank will find it much easier to develop a bill market in this country.

The main problem in India, therefore, is to bring the indigenous banker within the orbit of the Reserve Bank which would impart better cohesion to the organisation of the Indian money market. It is obvious that so long as the indigenous bankers remain out of touch with the Reserve Bank there can be no adequate regulation of currency and credit within the country.

Accordingly, Section 55 of the Reserve Bank of India Act provides that the Bank shall, at the earliest practicable date and in any case within three years, make to the Governor-General-in-Council a report, with proposals, if it thinks fit, for legislation with reference to the subject of the extension of the provisions of this Act relating to scheduled banks to persons and firms, not being scheduled banks, engaged in British India in the business of banking, and the improvement of the machinery for dealing with agricultural finance and methods for effecting a closer connection between agricultural enterprise and the operations of the Bank. With a view to fulfil this obligation, the Bank circularised a tentative scheme dated 6th may 1937, calling for the views of the public interested in the subject.

Indigenous banker an essential part of the banking structure.

The scheme recognises that even though the scheduled banks may develop branch banking on a rapidly increasing scale, they will not be able at least for a considerable time, to spread sufficiently widely to handle the whole of India's finance directly, on the lines of banks in more highly organised countries such as U.K. or U.S.A. Therefore the Bank came to the conclusion that the individuals and firms referred to in Section 55 of the Act must continue to be an essential part of the banking structure of the country, and any scheme for the proper control and regulation of banking in India must contrive to bring them within its ambit. This is a very sound conclusion based on an intimate knowledge of the money market of the country. The Central Banking Enquiry Committee came to a similar conclusion. They say: " From a study of the history of the progress of joint-stock banks in India, we are convinced that it will be a long time before India will have widespread network of joint-stock banks or branches of such banks. Further, although co-operation has made remarkable progress in the country since the movement first started in 1904, its extension on such a scale as to replace indigenous bankers cannot be envisaged within a reasonable distance of time . . . . We think it, therefore, of the greatest importance that, in the interest of both the general public and the indigenous bankers themselves, steps should be devised to strengthen the position of these bankers."

There is, however, an important class of critics who do not favour that the indigenous bankers should be linked with the Reserve Bank. According to them the indigenous bankers charge usurious rates of interest, resort to questionable methods of

keeping books and remorseless methods of foreclosures, and show total indifference to well established principles of banking policy. Thus their reluctance to modernise their methods of business is traced to dishonest motives lurking behind. "For our part," says *Indian Finance*, "we are certain that one of the greatest impediments to the progress of banking in India, and, therefore, of the national economy as a whole, is the hold which the moneylenders have on the small traders and the agriculturists. Modern banks can hardly strike roots in a soil in which the poisonous weeds of usury have thriven for ages. By making credit so ruinously costly, the indigenous bankers have set such heavy premiums on mere moneylending that even private individuals seek to gain a living by lending their small savings to poor agriculturists at unconscionable rates of interest." Thus, the indigenous banker seems to be practically an unmixed evil; he must be eliminated from the money market entirely and immediately, to make the country safe for the growth of joint-stock banking.

Indigenous bankers distinguished from moneylenders.

In view of the foregoing criticism it behoves us to make for the purposes of the present study a clear distinction between the indigenous banker and the moneylender and their methods of business, because regulation needs necessarily proceed along those lines. The linking of the indigenous bankers should precede the regulation of the pure moneylenders. Once the indigenous bankers are brought within the ambit of the Reserve Bank they will excercise very good influence in moulding the methods of the moneylenders. With their added strength, augmented resources, and more efficient methods, the indigenous bankers will substantially increase their sphere of activities, and, coupled with the assistance of the revitalised co-operative credit societies and the provincial legislation regulating the undesirable activities of the moneylenders, they will gradually succeed in removing the defects of those moneylenders who are willing to learn and to eliminate the rest.

Both the indigenous bankers and the moneylenders lend money. But there is an essential and marked difference in their business activities and methods. The indigenous bankers receive deposits, or deal in Hundies, or both, which are essentially banking functions. It is the deposit business which really distinguishes a banker from a moneylender. In the absence of reliable statistics, it is very difficult to estimate the total amount of such deposits. Experts have, however, pointed out that of recent years

the deposits received by the indigenous bankers have been on a decline. This is obviously due to the increasing competition of the co-operative and joint-stock banks and the reluctance of the majority of these bankers to give up their antiquated methods. Secondly, the indigenous bankers invest better portion of their capital in financing trade and industry rather than consumption, whereas the moneylenders finance consumption more than trade. Hundies are very popular with the indigenous bankers. They have been in vogue from very remote times. It is even said that a Hundi is perhaps the oldest surviving form of a credit instrument. Unfortunately there are no reliable statistics which would enable us to estimate the precise quantum of capital utilised by the indigenous bankers in financing the internal trade and industries, but it has been accepted that the amount is considerable. Again, the indigenous bankers are more careful regarding the objects for which the loans are required. Above all they charge decidedly lower rates to their customers and in certain localities successfully compete with the joint-stock banks. Thus, the indigenous banker plays an important rôle in our economic life in general and credit structure in particular. His activities do not constitute a clog in the wheels of our economic life, as has been suggested by some of the critics. The Reserve Bank of India has rightly appreciated the rôle of the indigenous bankers when it says: "The importance of the rôle which the indigenous banker plays in the financial and economic structure of India at the present time cannot be too strongly emphasised, and if the credit machinery of India is to be properly organised and complete, it is essential that he should have a definite place."

Central Banking Committee's suggestions for direct linking.

Now therefore we face the fundamental question as to how should the indigenous banker be brought within the ambit of the Reserve Bank? The Central Banking Committee has recommended that those indigenous bankers, who already confine their activities to banking proper, and those who are ready to give up their other business and to restrict themselves to banking, should be eligible to be placed on the approved list of the Reserve Bank, and to obtain rediscount facilities from it in the same way as joint-stock banks. Thus the Committee suggested direct linking of the indigenous bankers with the Reserve Bank and outlined a scheme for regulating their business activities and methods. Indigenous bankers must be restricted to banking business, because the Reserve Bank for its own safety can rediscount only

bank-endorsed paper. Further, the Reserve Bank should lay down that they must own a minimum amount of capital. The standard in this respect, however, should be fixed at a lower level for them than for the joint-stock banks. They should keep proper accounts, get them audited annually by the auditors recognised by Government, and allow them to be inspected by the Reserve Bank, whenever it desires to do so. As regards the question of making them keep a certain percentage of their total liabilities as interest-free balances with the Reserve Bank, as the joint-stock banks will be required to do, the Committee recommended the exemption for five years of those indigenous bankers, whose deposits are not more than five times their capital, from this rule of compulsory balances, and the withdrawal of this exemption at the end of five years, if the Reserve Bank regards this necessary to carry out its credit policy. This is essential to enable the Reserve Bank to control the credit policy effectively and efficiently.

Reserve Bank's plea for indirect linking.

The Reserve Bank in its tentative scheme, referred to above, suggests that it would be impossible, under the existing conditions, to deal with the indigenous banker direct. This because their number alone would make the direct linking impossible. To this must be added the highly personal and fluid character of their business which would require an impossibly large and costly organisation to keep personal contacts with them. Under existing conditions, therefore, the Reserve Bank can only deal with the indigenous banker through some immediate agency which will share the financial responsibility and undertake the detailed examination and control which is necessary if credit is to be accorded. Thus the Reserve Bank pleads for the indirect linking for the present. But it adds that " it will be prepared to give its most careful consideration to any practical scheme emanating either from the indigenous bankers themselves or from any other source for organising their own members to enable credit to be afforded to them direct."

The nervousness betrayed by the aforesaid remarks of Reserve Bank comes as a surprise. One only wishes that the Bank had taken a bolder and more confident attitude and faced the problem with courage. The suggestions outlined by the Central Banking Committee have made the issue more clear. There is no ambiguity about it. There is no room to-day for a choice between direct and indirect linking of the indigenous banker. The Committee has given its decided opinion in favour of the former. It would indeed be presumptuous to suggest that

the Committee did not know the number of the indigenous bankers and the character of their business. Knowing all these facts full-well, the Committee suggested that those of the indigenous bankers who satisfied certain conditions laid down by it should be directly linked up with the Reserve Bank. It would have been in the fitness of things if the Reserve Bank had made concrete suggestions for direct linking of the indigenous bankers in the light of the recommendations of the Central Banking Committee and discharged its obligation under Section 55 in spirit rather than in mere letter.

Conditions laid down by the Reserve Bank.

The Reserve Bank, however, lays down certain conditions which should be fulfilled by the indigenous bankers before they could think of being directly linked. These conditions are: first, they should become self-contained legal entities with reasonable resources of their own, such resources in the opinion of the Reserve Bank being *at least equal to* those stipulated for scheduled banks. This is rather a strict condition looking to the peculiar conditions of indigenous banking in this country. It is rather hard on the indigenous bankers to expect that they should have resources *at least equal to* those stipulated for the scheduled banks. Under Section 42 of the Reserve Bank of India Act, 1934, a scheduled bank must have paid-up capital and reserves of an aggregate value of not less than five lakhs of rupees. In other words, the indigenous bankers must have a capital of not less than five lakhs of rupees before their claim for direct linking with the Reserve Bank could be considered. Even then they cannot be sure of direct linking because "any such scheme will take a lot of working out." This attitude of the Reserve Bank is obviously hesistant and obstructive. In this connection the remarks of the Central Banking Committee are more realistic and helpful. The Committee unequivocally asserted that in respect of the minimum amount of capital the Reserve Bank should fix the standard *at a level lower than* that for the joint-stock banks. This because, as has been pointed out above, the indigenous banker depends primarily upon his own individual resources. Not so with the joint-stock banks. The standard for joint-stock banks should necessarily be higher.

Second essential condition is that they would have to maintain separate and properly audited accounts of their banking business with proper legal provision for the segregation of any other business which they might be conducting, so that liabilities incurred in respect of the latter would not affect their credit in

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respect of their banking business. This is, indeed, a very important provision and essential for sound banking. There can be no two opinions that the indigenous bankers desiring to have direct contact with the Reserve Bank should separate their banking business from any other business which they might be doing. Further the Reserve Bank has sufficient justification in expecting that such other business as the indigenous bankers might conduct would have to be confined to *bona fide* trading and not speculation, and their accounts should bring this out clearly. One may expect that they should conduct primarily banking business.

Thirdly, like joint-stock banks, they should make proper arrangements to ensure proper publicity of their transactions, particularly with reference to their balance-sheets and accounts. Lastly, for purposes of control, they would also have to maintain the same deposits with the Reserve Bank as scheduled banks. This condition requires further scrutiny. As regards the cash reserves of scheduled banks to be kept with the Reserve Bank, Section 42 of the Reserve Bank of India Act provides that every bank included in the Second Schedule shall maintain with the Bank a balance the amount of which shall not at the close of business on any day be less than five per cent of the demand liabilities and two per cent of the time liabilities of such bank in India. In this connection the Central Banking Committee recommended that so long as the time and demand liabilities of an indigenous banker are not more than five times their capital he should not be called upon to make a compulsory deposit required in the case of a scheduled bank. This should be an experimental measure for a period of five years. This is a more practical view suited to our conditions. The Reserve Bank needs to impose this condition so that it may be able to control the activities of the scheduled banks, and to ensure that at least a bare minimum of cash ratio to liabilities be kept. History of bank failures has taught us sufficient lessons in this regard to be cautious in our movements. Bank authorities in their drive for larger profits have not unoften thrown overboard all demands of prudence and reduced their cash ratio to liabilities, ruining thereby not only their own institution but the entire economic system of the country. The joint-stock banks are, however, more susceptible to this danger because the deposits play a prominent part in their business. In the case of the indigenous banker, who depends largely on his own resources, deposits are relatively less important. No doubt the direct linking of the indigenous banker with the Reserve Bank will substantially increase his deposits, but it is bound to take more time. Till then the indigenous bankers

need exemption on the lines indicated by the Central Banking Committee. One may suggest that even after the experimental five years have elapsed, those indigenous bankers alone should be called upon to make compulsory interest-free deposits whose liabilities exceed five times their capital, for a further period of say ten years. It is hoped that as a result of the privileges conferred on the indigenous bankers by their direct relations with the Reserve Bank, they would soon strengthen their position and improve their methods of business so as to inspire better confidence in their customers and soon be able to dispense with the special concessions granted by the Bank. In other words, the indigenous bankers should improve their organisation and business and bring it in line with that of the scheduled banks. This they may not be able to do within a comparatively short period of five years. If, however, within this period they have made some progress on these lines, the Reserve Bank should help them in this task of reconstruction by exempting them for a further period from the compulsory interest-free deposit. If that is not done and the Reserve Bank disaffiliates those of the indigenous bankers who are not able to make such deposits, better part of the work done during the period of first five years will be undone.

In this connection it is necessary to point out that the Reserve Bank will have to see that the benefits resulting from the special privileges conferred on the banking institutions linked with it are not used primarily for increasing the profits of those institutions, but that they are ultimately passed on largely to their customers. This is the primary object of the co-ordination of banking facilities by the Reserve Bank. Cheap and efficient credit facilities should be provided to the public. For instance, the free remittance facilities, which the indigenous bankers will be able to enjoy as a result of their direct connection with the Reserve Bank, should be extended to their customers.

From the foregoing discussion it will be evident that there will be a large section of the indigenous bankers who will not be able to comply with the conditions laid down for direct linking, and will not, therefore, be able to obtain banking facilities from the Reserve Bank. To such indigenous bankers the Imperial Bank and the other joint-stock banks should provide banking facilities more liberally in future, and particularly they should discount their bills more freely. This was the attitude recommended by the Central Banking Committee. Here, again, the Reserve Bank can render very valuable services. In practice these indigenous bankers should be indirectly linked up with the Reserve Bank. For instance, the Reserve Bank should encourage

the discounting of *bona fide* trade bills originating with an indigenous banker by making advances to the scheduled banks or the indigenous bankers having direct relation with it against their security. But these indigenous bankers should reform their methods of business and conduct their operations strictly according to legal requirements. Proper propaganda work would be necessary to convince the indigenous bankers of the utility of these improved methods of busines. The Central Banking Committee has pointed out that the indigenous bankers in spite of their conservatism are not averse to modification of their methods and practices if they are convinced that the modifications are practicable and profitable.

In short the Reserve Bank should take a more sympathetic attitude and its policy should be broad-based so as to gradually bring within its ambit the indigenous bankers as a class. This alone would enable the Reserve Bank to co-ordinate the entire money market, establish better and more intimate contact between different units, and to control effectively the credit policy of the country, as is being done by the central banks of the advanced countries. The indigenous bankers should also play their part. They should reform their methods so as to make them conform more to those of the joint-stock banks. Above all the general commercial public should also help the Reserve Bank in this task of national reconstruction by sincere co-operation. Mutual understanding, sincere co-operation and sound judgment can alone enable us to achieve our economic emancipation.

CARTELS AND THE TRADE CYCLE

BY

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Cartels and the Trade Cycle.

The problem of the effects of industrial combinations on the trade cycle has received some attention in the economic literature, but we find many conflicting views on the matter. Broadly speaking, there are four possible views on the matter and all the four have found expression in the literature on the subject. Firstly, there is the view that combinations have a moderating effect on the trade cycle. A Resolution of the World Economic Conference says that industrial agreements "act as a check on uneconomic competition and reduce the evils resulting from fluctuations in industrial activity." A more positive assertion is made by a great authority on combinations, *viz.*, Liefmann. In an article written in 1902 he maintained: "I rather believe that crises, that constitutional malady of the present economic organism, can be eliminated by a gradual transformation of this organism, whose first and most important symptom, as it appears to me, is the cartel." The recent policy of several governments in relation to industrial combinations seems to favour this view. There are, secondly, some economists who take an exactly opposite view. Prof. Muhs and others maintain that industrial combinations intensify industrial fluctuations, instead of reducing them. A third group maintains that combinations are neutral as regards their effects on the trade cycle. Lastly, we find some authors maintaining that combinations can reduce the intensity of some phases of the cycle but not others. Prof. Wagenfuer, for instance, who has made an inductive study of the problem, has come to the conclusion that cartels show a tendency to stabilise economic activity in the initial stages of both recovery and recession but in boom and depression they are powerless.

In the present paper an attempt is made to re-examine the question. Owing to limitations of space, several important questions have been left out, *e.g.*, the question of the effects of different kinds of combinations on the trade cycle. The effects of one kind of combination only, *viz.*, cartel, are considered here.

Further, the following arguments assume that cartels exist only in certain branches of industry and not in all. An economic system in which every industry is controlled by cartels is not considered here.

The supporters of cartels make two claims on behalf of the latter; firstly, that cartels maintain economic equilibrium by adjusting supply to demand and secondly, that they stabilise prices. The opponents of cartels deny these claims and add further that cartels are often responsible for over-investment. So we have to examine the influence of cartels on three factors, *viz.*, on production, price and investment.

Cartels and Regulation of Production.

The claim that cartels are able to adjust production to demand and thereby avoid overproduction, seems to be a reasonable one. Under a system of competition, a producer has no accurate information regarding the plans of his competitors and there is, therefore, the possibility of overproduction. Cartels can avoid this. But the question is whether, under the regime of cartels, demand is likely to be steadier than under competition. Production can be nicely adjusted to demand (and this is an advantage, no doubt), but unless cartels are able to stabilise demand, they cannot exert their full influence on the trade cycle. Changes in demand which are due to changes in tastes etc. cannot be reduced by them. As for changes which are due to changes in income and prices, they can reduce them if they can stabilise prices. The question is, therefore, intimately connected with the question of the stabilisation of prices which is the next topic for consideration.

Cartels and Stabilisation of Prices.

Most supporters of cartels claim that the latter stabilise the prices of their products and thereby contribute to the reduction of the intensity of the trade cycle. We have to discuss the following questions in this connection:

1. Can cartels stabilise the prices of their products?
2. What effects has this stabilisation on the prices of other commodities?
3. Is the price stabilisation by cartels as effective as the stabilisation by central banks?

There have been several attempts to find, from price statistics, support for the statement that cartels keep prices stable. There

is no evidence to show that cartel prices are absolutely stable, but attempts have been made to show that they are relatively stable, *i.e.*, they are stabler than competitive prices. Several methods have been adopted in the investigation of this problem. The most frequent one is the method by which the so-called " regulated " prices, *i.e.*, prices fixed by cartels and public authorities, are compared with " free " prices, *i.e.*, prices fixed under competitive conditions. This is the method adopted by Dr. Warriner in England and by most German economists. Dr. Warriner's study of German price movements shows that cartel prices were steadier during the period studied, *i.e.*, between 1926 and 1930, although she does not want us to draw any definite conclusion from this comparison. Prof. Wagenfuer, who has published a book on Cartels and Trade Cycles, has also studied the price statistics and came to the conclusion mentioned previously. Prof. Muhs, who is hostile to cartels, compares the price movements of each commodity in Germany which is controlled by a cartel with the price movements of a similar commodity in England where there is competition. He finds that only in the case of Rhineland-Westphalian Coal Syndicate there is evidence of a tendency to price stabilisation; all other cartels vary their prices according to market conditions. Some economists, *e.g.*, Beckerath, have maintained that there is no evidence whatever to show that cartels stabilise prices.

These conflicting views are due to the inadequacy of inductive method in this matter. There are no standard prices with which cartel prices can be compared. All methods of comparison are inadequate.

1. It is sometimes proposed to compare the price of a commodity after its producers have combined with the price prevailing before. As the cost of production and other market conditions might change meanwhile, the two prices are not comparable.
2. Where there are some independent firms in an industry in which there is a cartel, the price charged by the former can be compared with that of the latter. But this comparison is not fair. Such prices are not normal prices but are the result of warfare between the cartel and outsiders.
3. The prices of commodities produced by cartels can be compared with the general price level. This method too is defective. Cartels are established

in a particular type of industries, *i.e.*, those which produce raw materials, and there is the possibility of a change in the prices of raw materials, even in the absence of cartels, without a corresponding change in the general price level.

4. A comparison of the price movements of a commodity in one country where there are cartels with the price movements of a similar commodity in a country where there are no cartels is often made, but this is not accurate. The two commodities whose prices are compared might not be the same in quality. Further, the industrial structures of the two countries might be different. In the case of Germany and England, between which a comparison is often made, this objection is not very strong. The two countries have similar industrial structures and the different phases of the trade cycle coincide in the two countries to a greater extent than in the case of any other two countries. According to Professors Mitchell and Thorp, the different phases of the trade cycle coincided in these two countries in 33 out of 59 years and in 22 years there was a partial agreement. But even these figures show significant differences. Further, England depends on foreign markets to a greater extent than Germany and so the development of prices in the two countries might be different.

As the price statistics do not offer us a clear answer, we have to confine our attention mainly to theoretical possibilities. We have to consider separately the ability of cartels to keep prices comparatively high during depression and comparatively low during boom. For the sake of convenience, the first two of the above qustions, *viz.* those relating to ability to keep their prices stable and the effect of this policy on other prices, are to be considered together.

Price Policy of Cartels during Depression.

For cartels it is easier to keep prices relatively high in depression than to maintain them comparatively low in boom. The members of a cartel are more likely to agree to the former than to the latter. It might be said that, if cartel prices are kept high relatively to other prices, the demand for commodities

produced by cartels might fall and consequently, they might find it profitable to reduce their prices in order to maximise their monopoly revenue. But the reduction in price need not be so great as in the case of competitive prices. The fall in cartel prices can be smaller in magnitude and more gradual than the latter. What are the consequences of such relatively high prices?

Here there are two possibilities. It might be argued, on the one hand, that, by taking away a greater proportion of purchasing power than before, cartels reduce the proportion of the purchasing power going to other industries and thus deepen the depression in other industries. On the other hand, it is possible that, by distributing a relatively constant purchasing power among the factors of production cooperating in the production of their commodities, cartels might make the demand for other commodities steadier than would have been the case under competition.

The evil consequences of stabilising their prices by cartels or of slow and gradual reduction of these prices have been specially emphasised by several economists. It has been maintained by them that cartels must speedily adjust their prices to those of other commodities; else they deepen the depression. The argument runs as follows: Cartels control the prices of raw materials, which are used by other industries. In depression the demand for finished products diminishes and yet their manufacturers have to pay high prices for raw materials. Their profits fall to a greater extent than under a system of universal competition. The depression is, therefore, deepened. Further, according to Mueller-Armack, the policy of reducing prices gradually, instead of making one definitive reduction, will lead to further depression, because, in that case, consumers will postpone their purchases expecting a further fall in prices. If, on the other hand, prices are reduced once for all, consumers have no motive to postpone expenditure.

There is considerable force in these arguments, but one important point is overlooked here. By keeping their prices comparatively stable, cartels might, if the demand for their products is not very elastic, obtain a comparatively steady income and consequently, make the income of the factors of production employed by them comparatively stable. Hence the demand for final products might also remain stable.

This argument is valid only if the demand for cartel products is not very elastic. As the elasticity of demand varies from commodity to commodity, nothing definite can be said about the demand for cartel products in general. But one

important point might be mentioned here. The demand for raw materials stands in a functional relationship with the demand for final products. That is, the demand for one supports the demand for the other. If the producers of raw materials obtain steady incomes and these incomes make the demand for final products steady, then the demand for raw materials is also steady. It must be mentioned also that those who argue that cartels deepen the depression assume that the demand for cartel products is not very elastic. If that is not so, cartels will not be able to take away a greater proportion of income by maintaining their prices relatively stable. If the demand for their commodities is elastic, then by keeping prices high, they obtain a smaller revenue. Thus, the opponents of cartels have not proved their case. If the demand for cartel products is not very elastic, then cartels may at first obtain a relatively larger income but this does not last long and it does not ultimately lead to a reduction of the relative share, in income, of other industries, because the income of the cartels is spent in the purchase of other commodities. There is no special reason to suppose that the income of the cartels is hoarded. If, on the other hand, the demand for cartel products is elastic, then cartels do not, even in the beginning, obtain a greater proportion of income and therefore the question of deepening the depression does not arise. Further, such a definitive reduction of prices as Mueller proposes is not possible. There can be no such definitive reduction even under competition. If it is possible at all, it is so only under monopoly conditions and from this point of view, cartels have an advantage over competition.

Price Policy of Cartels in Boom.

A policy of price stabilisation means that in boom prices should not be raised. But this policy is difficult for cartels to follow. When prices are rising and there are greater chances of profit, it is in the immediate interest of the members of cartels to raise their prices also. Further, in booms the costs of production increase due to a rise in the prices of factors of production. So absolute stability is not possible but a relative stability is. Wolfers (Das Kartelproblem im Lichte der deutschen Kartelliteratur, p. 64) gives the following reasons which induce cartels to follow a policy of keeping prices low.

1. The most important cartels might have the foresight to realise the importance of avoiding crises and so they are cautious in their price policy.

2. Those cartels which are sensitive to public opinion may not raise prices much, lest they should be held responsible for the coming depression.
3. The bureaucratic machinery of the great syndicates will not be able to adjust their prices speedily to the rising prices of other commodities.
4. The great monopolists want to remain masters of the market and therefore they will not let the market dictate to them.

As has been mentioned before, there is no definite evidence that cartels do, in fact, try to follow a policy of relative stabilisation in booms. But suppose that they follow this policy. What, then, are the consequences?

Those who argue that the cartel policy of price stabilisation intensifies depression, argue also that the same policy leads to a crisis. When the prices of raw materials are relatively low and the prices of finished products are rising, the producers of the latter obtain higher profits which lead to an undue extension of production and ultimately to a crash. A speedy adjustment of cartel prices to other prices does not introduce this complication.

Here again, the argument does not take into consideration the fact that cartels distribute a steadier amount of income and therefore the demand for other commodities is also steadier. Hence, the other industries cannot make huge profits. Further, as cartels are mostly confined to the production of goods of higher orders, the stability introduced by them diminishes the disequilibrium between the production of consumption goods and that of capital goods. It is usually assumed that, when business is expanding, more round-about methods of production are introduced and greater quantities of factors of production are applied at higher stages. But when there are powerful cartels controlling the prices and output of the goods of higher order, this is not easy and so the policy of cartels might prevent undue expansion of industrial activity.

Price Stabilisation by Cartels and by Banks.

The above arguments show that the policy of price stabilisation by cartels has important effects on the trade cycle. In order to eliminate the trade cycle several economists have proposed that central banks should try to stabilise prices. It is not possible here to examine the merits of this proposal, but we may compare the relative merits of the two agencies, *i.e.*, cartels and banks, in this respect.

There are two important differences between price stabilisation by cartels and that by banks through their credit policy. Firstly, the immediate aim of cartels is to stabilise the prices of their products only, whereas that of banks might be to stabilise the general price level. Secondly, cartels cannot bring about absolute stability even in that section of the price level which they control. It might, therefore, be argued that banks are a more efficient agency to stabilise economic activity than cartels. Some authors even go further and say that the stabilisation of some prices, while leaving others to fluctuate freely, is more harmful than a policy of complete non-interference in the matter. The power of cartels is thus limited, but the policy of stabilisation by cartels has some definite advantages as against the use of credit policy for this purpose. It is not quite true to say that it is the general price level that the banks have to stabilise. It is not accurate to speak of a general price level. Strictly speaking, there are only individual price levels, and it is one of these price levels that the banks have to stabilise. If the cartels control the supply of all important raw materials, they make one price level relatively stable and then we have to compare the advantages of stabilising this price level with those of stabilising some other price level. If the stabilisation of the prices of raw materials is more advantageous than that of any other price level, then there is the further question whether it will not be better to employ banks for this purpose.

The prices of important raw materials are more sensitive to cyclical fluctuations than the prices of finished products. If that is so, there is a strong case for stabilising the former than the latter. If, however, the credit policy of the banks is used for this purpose, there will be some difficulties. Suppose that banks restrict credit when the more sensitive prices are rising. This might stop the rise in these prices but it might also depress the less sensitive prices. When bank loans are reduced, the manufacturers of the less sensitive goods too receive less from banks and this might reduce their output. To meet this situation, the policy of the banks has to be so changed that they decrease the loans to some industries and grant the same amount of credit to others as before. This is not impossible, but it has its own dangers. At any rate, with the present policy of the banks, the result of a stabilisation of the more sensitive prices by them is a depression in industries providing commodities whose prices are less sensitive. The stabilisation of the former by cartels does not produce this undesirable result.

Cartels and Investment.

It has been mentioned previously that the opponents of cartels assert that cartels are responsible for overinvestment in the industries controlled by them. This overinvestment is said to be due to several reasons, all of which can be traced to the fact that cartels make large profits. Large profits facilitate the so-called self-financing and attract large amounts of capital from outside. Some important consequences follow from this. Cartels can get on well without much help from banks and so they need not be afraid of the frequent changes in the rate of interest charged by banks. So far as this result is concerned, no one can raise an objection against it. It contributes to the stability of cartel prices. But other results are objectionable. The rate of interest ceases to function as a regulator of production and this is said to be a blow to individualistic economy. Cartels have much capital and they do not calculate interest on it. So interest is not entered as an item of cost. Lastly, as cartels attract more capital than is necessary under the present credit system, the other industries obtain less than their share and therefore, there is relative overinvestment in some industries and underinvestment in others.

If the above account is true, cartels can justly be held responsible for intensifying the trade cycle. But there is not much support for this view from the existing statistical materials. Dr. Warriner quotes the calculation of the Frankfurter Zeitung that, in 1926, the savings of German concerns were 28 p.c. of the total savings, whereas in England, where the cartel movement is not so strong, the percentage was 38. After the stabilisation of the Mark there was overcapitalisation in Germany, but this phenomenon was not confined to the industries controlled by cartels. The information regarding this matter is not, however, complete and so, from statistics alone, we cannot say whether or not there is relative overinvestment in the cartel industries.

For the present let us assume that there is overcapitalisation. We have to discuss whether this is immanent in the cartel organisation or whether it is due to the mistaken policy followed by cartels. Some economists are inclined to take the former view. The cartels make more than normal profits and therefore self-financing and attraction of large amounts of capital from outside are necessary results of this. But the argument is not quite sound. Firstly, a cartel with foresight tries to obtain a steady and not an abnormal profit. As we have seen, the cartels must resist the temptation of making high profits in boom, if they want

to avoid crises. Secondly, even if profits are high, it is not economical to have too much capital. When capital is contributed from profits and not borrowed, there is the temptation not to calculate interest on it, but this is an unsound policy, because if the sum is invested elsewhere or if it is distributed among the shareholders, it would earn interest.

These arguments show that overinvestment is not inherent in cartel organisation. If it exists (for this there is not much evidence), it must be due to the short-sighted policy of some cartels.

The above account shows that cartels, by following a far-sighted policy, can introduce some measure of stability into the economic system. It is not claimed that all cartels actually follow this policy. The temptation to raise prices in boom and obtain high profits is too great for them. That is why the qualification is introduced that they must have foresight. Further, it is not claimed that cartels can altogether eliminate the trade cycle. They have only a moderating influence on it. Lastly, in other respects cartels may have evil effects but we are not concerned here with all the effects of cartels. So the above arguments must not be taken as supporting cartels in all respects.

INDIGENOUS BANKING IN ORISSA

BY

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SUMMARY.

Moneylending has spread to all classes of the population. Indigenous bankers are confined only to a few big urban areas and they combine business with banking. It is the small moneylenders who supply most of the need for credit required by the agriculturists. The rate of interest is very high in rural areas. It generally varies between $18\frac{3}{4}$ p.c. to $37\frac{1}{2}$ p.c. per annum. There are very few Joint-Stock Banks. The co-operative movement is in a stagnant condition. Small farmers can only be provided with cheap credit under the existing conditions through the Mahajans. But we must guard against easy credit. Therefore it is suggested that each district should have a Moneylenders' Bank which should provide cheap credit to its members who in their turn should provide cheap credit to the agriculturists. It is also suggested that in the interest of the tillers of the soil agricultural land should be declared unattachable for non-payment of debt and further that mortgage of agricultural land should be prohibited.

Moneylending has been in the past and is still one of the most lucrative business in Orissa. A few decades back it was mostly confined to two castes, namely, Sahukars (Tellis) and Gurias (sweet-meat vendors). At present substantial moneylenders are to be found among all classes of the population. Brahmins have become an important moneylending class and have substantial moneylending business in the three coastal districts of Balasore, Cuttack and Puri. Almost everyone who has any spare cash to lend carries on moneylending in rural areas. A very considerable number of them have small working capital ranging from Rs. 50 to Rs. 500. Substantial moneylenders are to be found in a group of 6 to 8 villages who at times lend up to a maximum of Rs. 5000. Petty traders and Marwaries often lend on the security of standing crops or on the understanding that the cultivator will sell his crop to them.

Moneylenders in rural areas can hardly be classified as indigenous bankers for they neither receive deposits nor discount *hundis* nor transact remittance business. Indigenous bankers are only to be found in urban areas like Cuttack or Berhampur.

Their number is limited and they combine trade with banking. Trade is their chief business. Hundi and remittance are side-transactions arising in course of their trade. They hardly receive any deposit from the public partly because they do not inspire confidence, partly because of the competition of small Joint-Stock and Postal Savings banks but mostly because those who have any cash invest themselves in moneylending in rural areas at high rates of interest.

There are only two branches of the Imperial Bank in Orissa. There are 3 joint-stock banks. They are all local banks with a working capital of about Rs. 8 lakhs. None of the leading joint-stock banks in India have their branches in Orissa. The local banks are more or less of the nature of Loan offices. They generally give $6\frac{1}{2}$ per cent on fixed deposits for one year and lend money at rates varying between 12 per cent to 16 per cent per annum. The total working capital of the Co-operative Credit Societies amounted to Rs. 46·9 lakhs in 1936. They lend at rates varying between 12 per cent to 15 per cent per annum. During 1935 they advanced only a sum of Rs. 51500 to their members. Thus we find that most of the finance required both for short term as well as for medium and long terms are supplied by village moneylenders. Of all the provinces in India Co-operative Societies and joint-stock banks play the least part in supplying finance for agriculture or trade in Orissa. The only possible way of advance in the direction of providing cheap credit to the agriculturists lies therefore, for a long time to come, through the improvement of indigenous bankers and money-lenders.

The usual rates of interest in rural areas are one pice per rupee per month, *i.e.*, $18\frac{3}{4}$ per cent per annum on secured loans and $37\frac{1}{2}$ per cent on unsecured loans. In a good many villages the usual rate is $28\frac{1}{4}$ per cent. In more backward parts the usual rate is $37\frac{1}{2}$ per cent. In urban areas members of the liberal professions, fairly big landlords and even Government officers usually pay 12 per cent per annum. The kind of security on which the Imperial Bank lends is generally not forthcoming and therefore its business in Orissa is very limited. In rural areas money is generally advanced on personal security. Large sums are however lent out on mortgage of land. Where ornaments are pledged borrowers are entirely at the mercy of the Mahajans. Most of the trade and industry (like oil mills, flour mills) are monopolised by Cutchies and Marwaries and these people are generally able to get finance at 6 per cent from among themselves.

The Central Banking Enquiry Committee did not approve of the suggestion of licensing the indigenous bankers. It left it to the discretion of the Reserve Bank to register substantial indigenous bankers who could satisfy certain criteria and to give the latter the privileges of member banks. It also suggested the German system of "Kommandit" principle banks as a line of future development for providing rural credit. Besides these agencies which were to supply only short and medium term credits it strongly recommended the establishment of land mortgage banks.

The German system of "Kommandit" principle banks will not fit in in the peculiar conditions of Orissa. There are only 3 joint-stock banks with a very limited working capital of about Rs. 8 lakhs lending generally on the mortgage of land at rates varying from 12 per cent to 15 per cent per annum and these banks will not find the suggestion profitable. There is neither much scope for the opening of branches by the bigger joint-stock banks of India in this part because of lack of the type of security on which these banks usually lend. The other suggestion, namely, that the indigenous bankers should become member of the Reserve system is also not likely to appeal to them. It is very doubtful if a fair number of indigenous bankers will give up their trade or industry to enable them to become member of the Reserve system. Therefore the amount of credit flowing from the Reserve Bank through the medium of indigenous bankers in this part will be far from adequate for the needs of the province. It will also take a long time to create a supply of eligible paper for the Reserve Bank.

There is, however, an alternative to the proposals of the Central Banking Enquiry Committee which will largely meet our difficulties. At each district headquarter a moneylenders' or indigenous bankers' bank (called District Bank) with power to open branches should be established. It should maintain a register of moneylenders who are willing to adhere to certain conditions to be laid down by it. Of these the two important conditions should be:—

(*a*) the maximum rate of interest at which these moneylenders will lend out money in the course of their business, and

(*b*) the maintenance of their account-books in proper form which should be open to inspection by the inspectors of the District Bank.

As a *quid proquo* for these conditions certain privileges should be given to registered Mahajans. Loans advanced by them should be declared by law to be the first charge, subject to certain limitations discussed below, on the yield from land of the borrower and secondly, they should be provided with cheap credit on the security of their land by the District Bank. These loans should generally be of the nature of cash credit, *i.e.*, to say, the moneylenders will be entitled to borrow up to the maximum limit fixed in each case but may borrow or repay according to their convenience. The bank will have no legal or moral responsibility for moneylenders' transactions nor will it be a part of its duty to enquire into the nature of the security on which moneylenders themselves will be lending out to their customers. As a matter of course these moneylenders are likely to continue to lend out as at present, that is, partly on the personal security and partly on the mortgage of crop or hypothecation of ornaments. They are not likely to overfinance the cultivators and will limit their lending to the capacity of the borrowers. Since they are for all practical purposes dealing with their own money they are likely to exercise greater control than has been possible on the part of the co-operative credit societies.

In the existing conditions of the people of this province it is very necessary that some protection should be provided to them against the Mahajans and against their own-selves. Easy and cheap credit, whatever be its source whether through the co-operative societies, land-mortgage banks or registered money-lenders, will lead to overborrowing on the part of and consequent ruin of the agriculturists. Cry for moratorium and for scaling down the burden of debt will be heard every now and then as at present. Therefore a law should be enacted declaring all agricultural land unattachable for non-payment of debt. Mortgage of agricultural land should be prohibited. It will be permissible for the cultivator to pledge his crops but in order to leave something for his substenance and for payment of rent his right to pledge his crops should be limited to 25 per cent of the gross produce from land. In other words, not more than 25 per cent of the gross produce can be taken by creditors in any single year. It is suggested that the registered moneylenders should have a first claim to this 25 per cent from year to year till their debts are paid off.

The above suggestion has the merit of protecting the cultivators from over-borrowing and from becoming landless labourers besides providing the moneylenders good security for their money. Again this will compel the moneylenders to become

members of the District Bank for the loans advanced by the members will be the first charge on the produce. So long the village Mahajan has provided most of the credit—both short and long terms—and he is the best agency to provide the same in rural areas for many long years to come. A good many of them have been unscrupulous or have charged very high rates of interest. The above suggestion will remedy to a large extent these difficulties.

The District Banks (Moneylenders' Bank) should be shareholders' banks. 50 per cent of the share capital should be reserved for the moneylenders and indigenous bankers. In the beginning, however, the Government may have to buy a part of the shares but gradually these should be sold to Mahajans. The law should limit the maximum dividend payable on these shares on the lines of the Reserve Bank of India. The Directors should be elected partly by the members, partly by the shareholders and nominated partly by the Provincial Board. The District Banks will raise most of their finance by issuing both long and short terms bonds through the Provincial Board on the security of land mortgaged to them by the village Mahajans. Mortgaging of land with District Banks will be permissible.

The Provincial Board should supervise and coordinate the activities of the District Banks. The latter will fix the maximum rate of interest to be charged by the moneylenders in their districts subject to the approval of the Board. Debuntures will be issued by the District Banks only through the Provincial Board. The Board will also audit the accounts of the District Banks. It should consist of five members—three nominated by the Provincial Government and two elected by the District Banks. Men with considerable experience in agriculture, banking or finance will be eligible for being nominated to the Board. The Provincial Exchequer should bear the cost of the Board.

THE UNEMPLOYMENT PROBLEM: ITS HISTORY AND SOLUTION

BY

DR. D. PANT, B.Com., Ph.D.

SUMMARY.

The unemployment problem exerts its maximum pressure on the middle class.

This class had the best between 1914—'18 and up to 1920 on account of the Great War and trade booms and speculation. Since 1921 onwards and up to the present time, this class has been hit hard on the one hand by the projection of Religious and Political views into the economic domain and on the other by the "Wait and watch' policy of the Government who refuse to budge an inch from the arbitrary and illogical position which they have taken up.

This position has been made worse after 1930 on account of the peculiar attitude taken up by the mad West .and the madder America. Our own effort in solving this problem has not been in the right direction for it is believed, though wrongly, that the solution of this problem lies in changing the educational curricula.

The right attitude is to increase the demand which can be done by Indianisation, fixing a maxima and minima for jobs, monopolising our own markets for our own goods, and changing the viewpoint of the Government.

The repercussions of this problem on the social life of India are of a very grave nature. The state and the people have to co-ordinate their activities with a view to check the demoralisation of the unemployed person and to bring under control sex-aberration and crime.

Of the three strata of human society—the top, the middle, and the bottom—the unemployment pressure is maximum on the middle class.

Right up to 1914 this problem did not exist for the demand was on par with the supply and during 1914—'18 the demand always exceeded the supply and during the post-war boom period 1918—'20 (end of the year) unhealthy speculation and feverish activities created a hectic life which artificially pushed up the Demand Curve. So near about 1921, the curve touched the peak position.

Then came the end of the pyro-technic displays: the State went in with a vengeance for demobilisation and retrenchment,

the market went broke for defaulters submerged a few solvents, and the trade refused to stay put. It moved rapidly downwards till the nadir was reached in 1932 though its downward tendency became more marked from 1930 onwards.

The above naturally resulted in lowering the demand and lakhs and lakhs of educated people were thrown on the street.

This painful situation was further accentuated by certain domestic and foreign happenings in 1920.

For the first time in the history of India, religion and politics were projected into the economic realm thus upsetting the values on which the economic life of a country is based. The Government engaged itself in a tug-of-war with the Congress. Its dual policy of maintaining peace and order in this country and of maintaining as large a share of Indian market for Great Britain as possible brought it on the verge of collapse.

The mad West and the madder America were engaged in cutting each other's throat. The former composed of a large number of microscopic countries and a few big countries were and are engaged in making themselves independent of the foreign supplies while anxious to retain monopoly of dumping their goods outside .their geographical frontiers.

Uncle Sam got the Yellow fever and he realised, what he considers, the truth that the highest phase of Man's development can be measured from the bars of gold which he can accumulate. Thus the whole nation specialised in sucking the gold from different parts of the world and to-day Fort Knox in Kentucky occupies a higher position than the Statute of Liberty of which Uncle Sam was, once upon a time, proud. This speciality of Americans to look upon any object with a jaundiced eye played havoc with Europe and Asia and like a boomerang it has come back to America.

Our own Government refused to study the changed needs of the people. It went on fiddling with the old programme—autocratic currency, monkeying with the ratio, no reservation, no real Indianisation, no manufacturing of cheap credit, etc.—and unfortunately created a new trade which has been disastrous and will prove very disastrous if allowed to exist and expand, I mean the import of experts. We had recently experts to advise us how we should educate our boys! A few years back we had experts to find out what and how much our villagers consume.

If I blame the Government, then in all decency I cannot allow myself—I mean my own people—to go scot-free. We did not tighten our belt, try to better our position irrespective of what the Government did or does. We did not cut down the expendi-

ture on conventional necessaries. We did not take up the educational programme. What we did? Tried to create utopias and phalansteres. Mixed up the problems of this and that world and started a see-saw game with the Government—when we go down, the Government goes up and when we are up, the Government goes down. This did not carry us very far and that is why in solving this problem we are marking time.

The Right Attitude.

The right attitude is to view this problem from a proper angle which, I maintain, is to study it from the demand aspect and not to make confusion worse confounded by making an effort to solve it by restricting and controlling the supply. Unfortunately the bulk of the literature on this subject has gone off the track by over-emphasising the supply aspect of the problem.

Now take the question of Education which should be studied from two standpoints: Quantitative and Qualitative.

Quantitative: Everybody knows that the percentage of literacy in this country is the lowest if we compare India with the other civilised countries of the world and yet there is a cry for restricting the output. If this restriction is to be secured at the cost of Secondary education then the plan is ill-fitted to cope with the growing and multifarious problems of this country which is trying to regain the position which, once upon a time, she occupied in the history of the world.

What I would call the primary need of the country is to prepare ourselves for increasing the literacy percentage cent per centum every decade. But this must be a balanced increase, that is to say, a proper ratio between primary and higher education must be maintained. Mere increase in the number of those who have glimmerings of 3 Rs. shall not add to the moral, material and literary greatness of this country.

Qualitative: The imparting of highly specialised knowledge to the chosen few for which there is practically very little demand in the country is also a move in the wrong direction. Take for example the tuition cost of the Harcourt Technological Institute, Cawnpore. It works out at more than Rs. 6,000 per student per year. The B.Sc.'s who go in for this costly education and have to put in three years' training do not, after passing out, get a job of Rs. 100 per month. As far as the cultural education is concerned, there is ample room for side-tracking at any stage of education. But in the case of vocational education, this is not possible. Therefore, it is obvious that in the case of polytechnical education the needs of the country must fix the limit.

It has been often said—and most of the discussions have been on that line—that the whole system of education in India is wrong. And naturally a change in the system will provide a panacea for all the ills from which this country is suffering. This pre-supposes the inherent potency of education to create demand which is a wrong view.

Now all of us have some direct, first-hand, experience of the teaching here and abroad and we know that our own system does not differ much from what is being done in other countries.

Different subjects and different groupings to suit different tastes and different conditions exist in all the Universities of India which are ever anxious to march, even to go ahead, with the time. The voice of the Public is very audible in the Councils and Committees of the Universities.

Whatever change or changes you introduce in the sphere of higher education you cannot solve this unemployment problem until and unless this country creates demand. Therefore, the solution of this vexed problem lies not in tinkering with the supply of educated people, but in widening the sphere of their absorption. This can only be done if we mobilise our energy and direct it to the securing of

A. Indianisation;

B. Fixing a Maxima and Minima for jobs;

C. Monopolising our own markets by building up major and minor industries; and

D. Rooting out the present puerile policy of "Wait and Watch."

Take A. Some people define Indianisation as substitution of an Indian in place of an European. The definition is incomplete for what we aim at is not only to get the replacement, but also to provide some monetary relief to the country. This we can only derive if the Indian is given less than what the foreigner draws. What would be the effect of Indianisation in the army if the highest military rank is major-Subedar and all the foreign soldiers are replaced by Indian soldiers drawing the pay which the Indian soldiers are drawing to-day? At least, a relief to the extent of more than two crores a month.

This method applied in the State Railways will wipe out the minus and evolve a plus—a big plus—even to-day.

B. It is a notorious fact that top men draw fancy salaries not at all commensurate with the work they put in. In every

department, a healthy ratio between the bottom and top men must be maintained. An illiterate villager aptly summed up the ratio in the following words:

> "For the Babu pay, look towards the ground; and for the Saheb's pay, look towards the sky."

I submit that looking towards the ground for the pay of both is a natural and healthy method.

C. If any country in God's own earth is specially suited to make the experiment of self-sufficiency a success, then India is pre-eminently suited for it. We possess every kind of raw-material in adequate quantities, our hydel power can be further developed, any amount of labour is available, an insatiable large market makes us independent of foreign markets, and we have our own transport system: railways and roads but not water. So all we got to do in the latter is to reserve our inland and coastal transport for 100 per cent. Indians to make the chain complete without one weak or missing link.

And D. Face to face with the violent upheavals in the different countries of the world where every nerve is being strained to cope with the problems as they arise; our own Government still pins its faith on Free Trade, Manipulating Exchange, "Managed" currency, Importation of Experts, and various other empty shibboleths of the archaic days which are no more.

If the above four suggestions are kept in view, trade and Government and people will increase the demand for educated men to such an extent that even the 100 per cent increase in literacy every ten years will not be able to cope with the demand.

With all the emphasis at my command—apologies for stealing this nice phrase—I submit that the only method by which we can solve this unemployment problem is by increasing the demand for educated men and not by restricting the supply of educated men.

P.S. I am afraid the social aspect of Unemployment Problem has been totally ignored. It is a question of all questions in this country for the stability of our present society depends on it. I simply enumerate the points which are the resultants of this problem:

I. Demoralisation of the unemployed person;

and II. Upsetting of the marriage-ratio: Grown-up adults refusing marriage and multiplying sex-aberrations and crimes.

INCIDENCE OF UNEMPLOYMENT AMONG ENGLISH-KNOWING PERSONS IN THE MADRAS PRESIDENCY

BY

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SUMMARY.

This is a study of the unemployment data collected by the Government of Madras in 1937. There is unemployment even among those who received technical education. There is no kind of service in which there is no unemployment. But we cannot say which line of service is less congested than the other. The present problem of unemployment among English-knowing persons cannot be solved successfully by asking them to cultivate lands which are found useless by cultivators. It can be solved successfully by developing large-scale industries which turn out production and consumption goods. Among the unemployed there are many who are aged above 26 and schemes to provide employment should be executed at an early date.

This paper is based on the data available in some 855 applications and replies sent by English-knowing unemployed persons in the Madras Presidency to C. J. Paul, Esq., Secretary to the Development Department, Government of Madras. In July 1937 the Government of Madras notified in all the widely circulated daily newspapers, English and Vernacular, their intention of collecting unemployment statistics. The unemployed were asked to submit to the Government a note containing particulars regarding their (1) name; (2) address; (3) educational qualifications, with dates of passing examinations; (4) employment, if any, held previously; and (5) the nature of employment sought. In some districts the Government distributed unemployment questionnaires which have the following sentence above the place where the unemployed was to sign:—"Very much obliged for your enquiry and hope to hear of some redeeming project from you." Many thought that the Government would give them jobs immediately. Such persons sent empty applications, sometimes

of three to four closely typed sheets, describing their miseries and qualifications, as vividly as possible. Even persons who could not write in English sent their applications written in their vernaculars. Some who understood the nature of the enquiry sent small pieces of paper with the necessary information. Applications were sent from every district. There were Hindus, Mohammedans, and Christians among the applicants. There were Indians, Anglo-Indians and Europeans among the unemployed. Applications were received from persons who got through examinations ranging from II Form (English) and its equivalents to M.A., M.Sc., M.L., M.B.B.S., B.E., B.M.E., etc. Some had practical experience but did not sit for any examination. Applications were sent by persons who were preparing for examinations to be held in either September or December, and also from persons whose services would be dispensed with after a few weeks. Some of the applicants were declared in last June only as successful or otherwise in their examinations, while some lost jobs eight to nine years back. Although the Government wanted to receive applications from persons aged 26 and below 26, applications were sent by persons whose age ranged from 16 to 57.

The data available is defective to some extent. 25 applicants did not specify their educational qualifications. 77 per cent of the applicants did not mention age. Except a dozen none mentioned precisely the duration of unemployment. Sometimes the occupation held previously was not noted clearly. In spite of various defects the data available in the 855 applications and replies are valuable enough to draw a correct picture of unemployment among English-knowing persons and to ascertain the causes of unemployment, because the data represent conditions in every section of the unemployed.

In the following paragraphs we shall study the incidence of unemployment.

Age of the unemployed.—The age of the unemployed deserves consideration because it determines the duration of the work to be provided to the unemployed. A person aged 20 generally requires work for 35 years, while another person aged 30 requires work for 25 years only. Moreover the burden of unemployment and the speed with which employment should be created for the unemployed are related to the age of the unemployed. A boy of 16, trying for a job, may be too poor to spend some more years at school and to qualify himself for a well-paid job. On the other hand, a youngman of 30 who spent many years till then in some university is generally rich enough

to spend a year trying for a job. Of course his standard of life and the number of dependents on him are more than those of a boy of 16. The burden of unemployment is heavier on persons aged above 26 than that on persons aged 26 and below 26.

The following table shows the age composition of the unemployed:

(1) Age of the unemployed.	(2) Percentage of the unemployed in each age group to the total unemployed.
Below 20 and 20	11·3
21 to 25	57·4
26 to 30	26·2
31 to 40	3·6
41 to 57	1·5

Only 23 per cent of the unemployed stated their age. Many did not state their age because the questionnaire issued by the Government has no column for "date of birth." A large percentage of the unemployed did not mention their age probably because they were aged above 26. (Persons aged above 26 are generally age-barred for Government service.) So the unemployed aged above 26 form more than 31·3 per cent of the total unemployed. They may form even 40 per cent.

The qualifications of the aged among the unemployed were not always insignificant. One person, aged 40, had twelve years' experience in electrical works. He was a draftsman and a signaller. He worked in the Great War. Another person put in a service of 17 years as shipping clerk. He had been to the Far East. Another person, aged 55, spent five years in England and became an expert in Beekeeping and Poultry. He knew carpentry and building construction.

Educational qualification of the unemployed.—Educational qualification of the unemployed is the most important point of consideration. Age, caste, race and sometimes previous service have no value when a person has not the educational qualification prescribed for a job. Among the unemployed in this presidency some have two, three and even four qualifications. Some got through university examinations while some got through the Government examinations and other examinations. Some were skilled enough to work in certain capacities but did not get through the prescribed examinations. Many who underwent technical courses completed apprenticeship also.

The following data give an idea of the incidence of unemployment:

(1) Qualifications.		(2) Number of the unemployed.
Below S.S.L.C.		58
Failed S.S.L.C.		63
S.S.L.C.		221
S.S.L.C. with Typewriting Lower, Book-keeping, Shorthand, Agriculture, etc.		74
S.S.L.C. with Teaching Diploma		23
Intermediate failed		50
Intermediate		34
Intermediate with Typewriting, Shorthand, Bookkeeping, etc.		23
B.A. Failed		25
B.A.		97
B.A. with Typewriting		7
L.T.		10
B.A. Hons.		10
M.A.		9
B.L. and M.L.		13
B.Sc. and B.Sc. Hons.	Chemistry	13
	Botany	2
	Physics	10
	Mathematics	7
B.Com.		3
L.M.P. and M.B.B.S.		6
Ayurvedic and Indian Medicine		6
Elementary School Teachers Training		11
Vidwans and Siromanis		14
Compounder's (Exm.)		16
Diploma in Mechanical Engineering (L.M.E. included)		9
Diploma in Electrical Engineering		6
Lower and Upper Subordinate Engineering		4
B.E.		1
Diploma in Sanitary Engineering		2
Diploma in Veterinary Course		2
Sanitary Inspectors Course		1

Some applicants stated that they knew typewriting and shorthand; but they did not get through any examination in

typewriting and shorthand. In the above table such persons are considered as unqualified. There are cases in which the unemployed had put in some service as typists, though they did not hold any typewriting certificate. Such persons are considered as qualified. A point which we should bear in mind while studying the problem of unemployment in this presidency is that most of those who have more than one qualification, *e.g.*, S.S.L.C., Typewriting, Shorthand, and Cooperation, first undergo one course, afterwards spend some months unemployed, then undergo another course, again remain unemployed for some months and again undergo another course.

The above table shows that persons who underwent arts course only were about 77 per cent of the total unemployed. This is so because (1) arts courses are cheaper than technical courses, (2) the demand for the services of those who underwent technical courses is less than the demand for those who underwent arts courses only, and (3) a large percentage of the applicants left schools and colleges too recently to possess additional qualifications. As most of the clerical jobs advertised in newspapers require candidates with Typewriting, Bookkeeping, Shorthand, Accountancy and other qualifications, some of the unemployed qualified themselves to be typists and account clerks—23 per cent of the S.S.L.C.-holders were qualified to be typists. Shorthand and bookkeeping were less common additional qualifications among the S.S.L.C.-holders. Among two unemployed S.S.L.C.-holders there are some who got through examinations such as general mechanism, electric wiring, training in Agricultural Research Stations, beekeeping, Homoeopathy, cooperation, proofreading, compounding, criminal test, revenue test, account test, rural service training, accountancy, teaching, telegraphy, Hindi Pradhamic, freehand and model drawing, chemical technology (manufacture of soaps, biscuits and patent medicines), weaving and spinning, engraving, enamel-lining, block-making etc. Some qualified themselves to be surveyors, village officers, police sub-inspectors, and vaccinators. Among those who were successful in Intermediate examination as well as among those who failed in that examination there were many each of whom had two or three of the above qualifications. Typewriting was the most common qualificatiin. Some Intermediates got through higher examinations in typewriting, shorthand, bookkeeping, etc. Some graduates also passed typewriting, shorthand and accountancy examinations. Some passed examinations in banking, teaching, and law, while some got through Local Self-Government Service Diploma

examination, revenue test, cooperation, audit, electric technology, signalling, telegraphy, homoeopathy, etc. Some of the unemployed were successful in the Madras Public Services Commission examinations.

Nature of previous service.—Information regarding previous service is very meagre. Some of the unemployed who had previous service did not mention when and where they had worked. Only a few mentioned what pay they drew. The nature of previous occupation was not stated clearly. One wrote that he had worked in a factory, another in a motor company and a third worked in a news agency office. They did not mention what positions they held and what they were paid. Some worked in more than two departments. Anyhow the available information enables us to understand the nature of the jobs held by the educated youths. A close study of the applications from the unemployed S.S.L.C.-holders reveals that the latter were ready to work in any capacity, under any employer, and on any pay. S.S.L.C.-holders worked as private tutors, stamps vendors, petty clerks in sugar factories and motor companies, building maistries, shroffs and deputy shroffs in revenue offices, proof-readers, copyists, bill-collectors, attenders in offices, process servers, shorthand-writers and typists in firms, general clerks in Municipal and District Board offices, compounders, electric wiremen, etc. Most of these might have been paid less than Rs. 30 per mensum. Only a few were fortunate enough to work as clerks in the Government offices whose pay is generally Rs. 30 and above. Compared with S.S.L.C.-holders, Intermediates and Graduates held well-paid jobs. Graduates worked as branch post masters, inspectors of Insurance agencies, salesmen, teachers in High Schools, clerks in Panchayat offices, telephone operators, inspectors of Cooperative Societies, clerks in District Board offices, clerks in Devasthanam offices, accountants in banks, supervisors of temple Inams, librarians, chemists in sugar factories, managers of film offices, etc. Many graduates worked in Government offices.

Duration of unemployment.—We should not neglect the study of the duration of unemployment. Only a few of the unemployed stated the duration of unemployment. Where the duration of unemployment was not stated we should consider the duration of unemployment as that which remains after deducting service from the interval between the date of declaration of examination result and the date of submitting the present application for job. In the cases of some who had more than one qualification, the time required for the preparation for the

additional examinations is added to the period of study. The following table gives us an idea of the duration of unemployment:

(1) Duration of unemployment.	(2) Percentage of the applicants in each duration group to total applicants.
1 year	32·0
2 years	21·9
3 years	10·9
4 years	10·1
5 years	7·0
6 years	5·2
7 years	2·3
8 years	1·9
above 8 years	0·7

Only 6 were unemployed for 6 to 8 months. Those who were unemployed for less than 1 year are omitted in the previous table. The table does not give us proper idea of the nature of unemployment because the duration of unemployment generally increases with the rise in the age of the unemployed. The duration of employment of a person aged 50 is naturally longer than that of a youngman of 20. As the data before us are not adequate to study the duration of unemployment by age, and qualification, we shall notice the different durations of unemployment by qualifications.

(1) Qualifications.	(2) Duration of unemployment in years.
Below S S.L.C. Class	4·5
Failed S.S.L.C. Class	3·4
S.S.L.C.	3
S.S.L.C. with Typewriting, etc.	2·2
Failed Intermediate	3·4
Intermediate	2·5
Intermediate with Typewriting, etc.	1·9
Failed B.A.	3·1
B.A.	2·5
B.A. (B.Sc.) with Type, Teaching, Law, etc.	1·9

The duration of unemployment among those who failed in Intermediate and B.A. examinations and have no technical

qualifications is longer than that of those who passed in S.S.L.C. and Intermediate examinations. This is partly due to the time spent preparing again for examinations. We cannot attach much importance to the differences in durations of unemployment because the duration of unemployment is bound to differ according to the nature of employment to which a person is qualified.

Summary and Suggestions.—1. There is unemployment in every kind of service ranging from that of an office attender to those of office managers, lecturers, engineers, medical officers, chemical analysers and legal advisers. There is no line in which there is no unemployment. But we do not know the rates of unemployment, that is, the proportions of the unemployed to those who obtain annually the qualifications required for recruitment into each branch of service.

If the Government publishes annually employment and unemployment statistics by age, qualification, and previous service (similar to Agricultural Statistics), every student can understand the prospects of different courses of study and avoid the lines which are more crowded than others. The most important cause of unemployment is the poor progress of our industries but not scarcity of facilities to take up technical courses of study.

The present problem of unemployment cannot be solved by asking educated youths to cultivate barren lands which are called cultivable wastelands, because agriculture is the most congested of all occupations and there is not enough land even for the present agriculturists. The problem can be solved by (1) increasing public works—roads in country parts, irrigation works, clearance of slums and raising of well-ventilated spacious houses; (2) wiping off illiteracy; (3) increasing the large-scale production of production goods and consumption goods.

A large percentage of the unemployed are aged above 26 and the burden of unemployment is very heavy. So some schemes to provide employment should be executed as early as possible.

INDIAN UNEMPLOYMENT AND ITS REMEDY

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In the post-war period the problem of unemployment has become very acute throughout the world but our unemployment is very much different from American and European unemployment. In the West unemployment is due to over-production in industries and lack of purchasing power in markets both at home and overseas; while in India the quantity of goods manufactured is not sufficient to meet even the home consumption and we depend upon imports. Indian labour remains idle while we provide work for other countries. There is the permanent unemployment of the agricultural masses for a part of the year extending to a period as long as four to six months. In the cities the artisan labour has been supplanted and substituted either by the Indian mills or by foreign imports. The educated and the semi-educated youngmen have so far been largely depending on Government or semi-government or private employment mostly of the clerical nature. For a few years when demand for English-knowing men in the country was greater than the actual supply such dependence on service was paying or at least convenient. With a constant increase in the number of educated and semi-educated youngmen the demand for clerical jobs has long been over-supplied and the surplus now represents our unemployed number. In recent years the Government of India and the Provincial government have been considering this problem. The last report known as the Sapru Committee Report concentrated its attention to the educated middle-class unemployment. But the middle-class unemployment is a part of the wider problem of unemployment, under-employment and wrong employment of the entire resources and factors of production in India.

The treatment of a subject like unemployment class by class does not seem to be a feasible one. The problem is closely associated with the whole economic structure and organisation of the country. The problem should be considered on the basis of all classes and any remedy which does not cover the permanently

and partially unemployed agriculturists, the idle artisans and the educated classes has little chances of success. After all money for carrying out unemployment schemes is to come out of these very toiling masses in the form of taxation and so long as more purchasing power cannot be put in their hands no scheme can hope to achieve success. A scheme which ignores these classes will be a scheme of the producers who ignore the consumers and will meet the fate it deserves.

Secondly, unemployment is an all-India problem and must be treated as such. Provincial solutions may remove minor local disabilities but they cannot solve the problem in its entirety. Moreover there is a great fear of needless overlapping and duplication and in certain cases even of uneconomic waste. Such schemes will be nothing short of schemes of economic self-sufficiency for small regions. Local economy must now yield to national economy. If all provinces in India try to be economically self-sufficient and adopt schemes for the removal of their unemployment problems irrespective of their effect, good or bad, on other provinces and the country as a whole, it may lead to a wasteful competition among the provinces, unnecessary sacrifice on the part of consumers for those industries which enjoy no natural advantages in their province and may develop a spirit of narrow provincialism. Problems of unemployment should therefore be considered on an All-India basis.

Now we take up the various recommendations. The Sapru Committee recommendations can be grouped under three heads: (1) substitution of educated labour for the uneducated or the semi-educated, (2) extension of the scope of existing occupations, and (3) opening new avenues.

The first is not, really speaking, a solution of unemployment. Mere substitution of one class by another will not remove unemployment. What is really wanted is more work and creation of new employment. The recommendation that municipal and local bodies may employ better qualified engineers and overseers in place of the present semi-qualified men, or that the contractor be compelled to employ qualified engineers for supervision instead of his own experienced men or a substitution of qualified lawyers for unqualified draftsmen, fall under this category. Unemployment is due to the paucity of work for those who are otherwise employable and not because of the scarcity of qualified men and experts or the inefficiency of present employment. A substitution of experts for less qualified will therefore make no difference in the number of unemployed men. There are two other objections to this substitution of labour: (1) The services will

become more costly and it is doubtful whether the general public can afford them at a new high cost in these days of depression and shrinking purchasing power. (2) What is to happen to the poor inefficient men who are to be so eliminated? Are they to return back to the over-crowded and less remunerative agriculture and further increase the pressure on land or to starve and die?

An extension of activities in already existing occupations is certainly very desirable provided there is really a scope for it. It has been suggested in the case of medical graduates that they should penetrate into the interior of the villages and earn a living there. A question may be pertinently asked as to how many villagers can afford a treatment of even a local Vaid or a Unani Hakim. The masses do not get even two square meals a day and it is doubtful if they would spend money over medical treatment. The allopathic system of treatment, which these youngmen are advised to take to the villages, is very costly and has even less chance of becoming popular and paying. It may not pay even its cost of training to the poor doctors.

Government service can hardly be looked upon as a profession which has a chance of expansion. Administration costs in this country are already very heavy and no unnecessary hands should be employed on the ground of relief to unemployed youngmen. After all, government service can provide work only to a microscopic minority.

The Committee has recommended 'some new avenues of employment such as accountancy, architecture, insurance, veterinary surgery, librarianship, clerical and secretarial work, salesmanship, aviation, cinema, broadcast stations, reception services and journalism, manufacture of drugs and medicines, etc.

Insurance, accountancy and clerical work are already taken up as a profession by a few, though in recent years insurance has attracted a fairly good number of youngmen. These occupations do offer a little scope but not many can be provided in these lines. Some of these can succeed if Indian business and commerce show an improvement and can afford to pay for these specialised services. Journalism in India is unremunerative. Most of the papers, dailies and journals, are run at a loss because newspaper-reading in the country is still considered to be a luxury of the rich and the educated. It is only in big cities and towns where a few hundred copies of the newspapers are sold. The general masses cannot read and follow English. Vernacular journalism may have a little scope if the habit of paper-reading becomes common. Even then, about a dozen or two journalists will provide enough

reading material for the whole province. At any rate, these occupations cannot solve the problem to the full.

The real solution of unemployment lies not in Government services and occupations mentioned above but in the development of industries and trade. New industries should be started in the country and the existing ones should be improved and encouraged to provide additional work for the labourers, the semi-educated and the educated. The sugar industry, for example, which is only of recent growth, has, during the short period of protection provided employment for 2500 graduates, over 100,000 industrial labourers and 2,00,00,000 cultivators. Besides this, it has opened numerous avenues as subsidiary occupations, transport industries and marketing organisations, including middlemen and cane contractors. The protection to match industry is another illustration. With a protective duty on foreign matches the value of imports under this head has gone down from the post-war average of Rs. 1,76,68,000 to Rs. 48,000 in 1936-37. The sum of Rs. 1,76,20,000 was thus saved and additional employment provided for the Indians. At present over 16,000 persons are employed per day in match factories in India.

The question now is to find out suitable industries which can be started in the country. A review of the items of international trade shows that we import quite a large number of commodities covering 56·3 per cent of the total import trade, which can be immediately replaced by our own products. These industries may develop many side industries, transport services, marketing organisations and financing and banking houses and thus create additional employment. A large number of middlemen may be needed in the various stages of production and distribution of product. If a sum of Rs. 69·23 crores which is exported today, can be retained in the country and an additional work to the extent of half the value of these imports, if not more, can be provided by connected occupations as outlined above, the unemployed can earn their share out of a total sum of 105 crores of rupees annually. With a fall in imports there would be a corresponding fall in the export of raw materials. Firstly, as a matter of necessity, we would like to stop the export of some of the raw materials like oilseeds, hides and skins. Secondly, in the case of raw materials like jute and such other commodities in which India enjoys a monopoly, there can be no apprehension of a fall in export. Thirdly, the surplus raw material exported today may find a market within the country. Last of all, a fall in imports may be compensated by an increased import of machinery. There can, therefore, be no danger of the balance

of trade being very much upset. It may further attract and divert some agriculturists and farm labourers to industries and thus relieve the excessively high pressure on land to that extent.

Besides these there are a number of small cottage industries which have a sufficient scope for development and which can profitably provide employment to some. A long list of cottage industries in the United Provinces in which work is done without the use of any mechanical power is given by the U.P. Industrial Finance Committee Report. There is good scope in some of these and the list is by no means exhaustive. They can provide work for quite a large number of educated and semi-educated youngmen. The capital cost is negligible and all that is needed is an elementary technical knowledge and the power of organisation and marketing. The raw material and labour are available at hand on cheap rates. The period of training in most of these industries varies from a week to about two months. The All-India Village Industries Association during the period of one year has started some village industries with success. The introduction of grid electricity in the U.P. has made cheap power available for cottage industries in the villages and this would be an additional facility in starting the industries. Some of the village industries can form part of a scheme of rural uplift now taken in hand by the Government. In old Indian handicrafts which are in decadence the skill is lying hidden and suppressed and can be easily developed. Only the methods have to be modernised to suit the new conditions.

In Japan, even today there is relatively a large number of small firms. A large proportion of the total industrial output in the country is done by 'Domestic Industries.' Taking the country, as a whole, the small workshop and cottage industrial unit is still the predominant type and the term 'factory' as understood in this country is an exception rather than the rule. According to the investigations made by the Tokyo Chamber of Commerce in 1935, over 96 per cent of the factories in Japan employ less than 100 workmen. This does not include the very small workshop employing even less than five men because they are not termed as factories. It is this type of small units on which the Government of India should concentrate because such industrial units can be organised locally where raw material is cheaply and easily available, with small capital, a simple organisation, and a short-period training.

The question of technical labour is solved in Japan by a scheme of compulsory primary or general education and vocational training on a large scale for a longer time. The

proposed educational reforms in the provinces have already incorporated a scheme of compulsory primary education and vocational training along with secondary education. The next problem is to provide adequate funds for the new industrialists. For long Indian capital was held to be 'proverbially shy' but things have now changed and with the slightest security of investment and promise of return there is no dearth of capital. The sugar industry after protection did not suffer for want of funds and all Government loans floated recently were easily over-subscribed even at a very low rate of interest. The bank rate is already very low. The uncertain Government policy of protection and security to industries is in the main responsible for scaring away the banks and the general investors from taking risks in new industrial enterprises. Therefore, under the present circumstances, state aid in the beginning is absolutely necessary to ensure their growth and prosperity.

The present situation can be summed up as follows:

(1) There is ample capital lying idle and ready to be invested.

(2) There are educated youngmen and labourers without work.

(3) There are industries which can be easily developed and for which markets are secure.

(4) There is a state of indecision among the investors for new enterprises due to the uncertainty in government policy.

The need for an agency to coordinate the first three factors is very great and this organisation may be provided by the Government. By borrowing money directly or by even guaranteeing the interest, Government can command huge capital resources in the country, and it is very likely that with the Government initiative private investors may take courage and start business even independently. They would be at least sure of the Government intentions and the uncertainty and indecision may disappear. The Government in the beginning may start small industries but when the enterprise attains success it may be handed over to the youngmen subject to Government control for the period the capital cost is not repaid. Another alternative may be to organise small producers' cooperative societies consisting of the group of youngmen preferring the same industry and to finance such societies in place of the individuals. The Financing and Marketing company, as proposed by the Pochkanwala Committee, may

then help these industrialists in disposing of the product and in developing new markets. In Germany and Japan the initial capital, in such cases, is either advanced by the banks or the total share capital of such companies is underwritten by them. In some cases, company shares are even purchased by the banks which are mostly under Government control and financed by the government in certain cases.

The Government will have to adopt a dual policy of protecting these industries against foreign competition by tariffs, exchange rates or even prohibition, and of helping them by patronage, technical advice and research, organisation and subsidies.

Even at present there are some large-scale industries which can be developed only if the unfair competition can be stopped. Paper is imported in large quantities valued at about 293 lakhs of rupees annually, apart from printed books. Paper-making is an excellent industry both for the cottage workers and the mill magnates. It can utilise all forms of village waste material such as rice, husk, straw, etc. A few simple instruments are needed to make pulp. The other equipment is simple and cheap. Women and children can be employed in this industry during the spare hours and it needs only a little to acquire the art. The mill industry can command abundant supplies of bamboo pulp and cheap labour. The industry has already been approved as fit for protection and satisfies the conditions laid down by the Fiscal Commission. The only drawback for the industry is foreign competition. If protection is granted to this industry it can flourish very soon and capture the entire Indian market for paper. This protection is needed only for a short period just sufficient to allow this infant industry to grow and to develop the existing resources to the full advantage. The industry may then be able even to export the surplus produce to other countries.

The second case is that of glass industry. India imports glass and glasswares for about a crore and forty-two lakhs of rupees annually. The raw materials for the industry, namely, sand and lime, are available in fairly satisfactory quantities. Labour is cheap and readily obtainable. Skilled labour in glass industry is still available as the art is practised in its indigenous form in small towns and rural areas. "The natural protection enjoyed by the industry is unusually great—glass being both a heavy and fragile article." The industry affords to small local establishments the benefit of markets in their vicinity while imports have to stand the transport over long

distances. It is only the foreign rival who stands in the way of the growth of this industry. The Tariff Board recommended protection for this industry also. It may be pointed out that, due to tropical climate, it is not possible to manufacture fine glasswares in this country but ordinary qualities for every-day use can be easily substituted.

Cotton piece-goods manufactured in this country supply only 72·1 per cent of the total demand for cloth in India and there can be no doubt that the remaining 27·9 per cent can also be produced, easily and conveniently, only if foreign imports can be stopped. The country can, in no time, be self-supporting with regard to this important item in our imports and can save 18 crores of rupees from going outside the country.

The apprehension that prohibition of imports of cotton piece-goods may lead to a fall in our raw cotton exports and ultimately affect the Indian agriculturists is not well-founded. Increased production of cotton piece-goods would increase the demand of Indian mills for raw cotton by about 40 per cent. The present consumption of Indian cotton in Indian mills is about 60 per cent of the total annual production of cotton within the country, excluding the consumption of imported cotton. An increase in the demand by 40 per cent of the present consumption will mean a total consumption of about 85 per cent of the cotton produced in the country. Secondly, the threat of the Japanese boycott of Indian cotton, if her piece-goods do not find a market in India, may not materialise. Japanese production is mostly of coarser cloth for which Indian cotton is the most suitable. America and Egypt cannot export raw cotton sufficient to feed the Japanese mills and it may be more costly also. Thus there is no great immediate danger for the export of the remaining 15 per cent of raw cotton produced in India. Let us now assume that Japan can develop cotton areas in Manchuko and China and can thus translate her threat into action. With a fall in cotton exports, the price of cotton will go down but it would mean cheaper raw material for Indian cotton mills, which may then compete with Japanese mills in neutral markets nearer India. It would thus be in Japan's interest to purchase cotton from India and keep the prices of raw cotton high in this country. Our cotton exports to Lancashire are not very appreciable and hence a fall in these exports would have no serious effect.

We export oilseeds worth Rs. 18·5 crores and buy back the oil, having in the process deprived the oil-presser of his occupation, the land of manure and the cattle of fodder. The oil

industry can be easily developed. Oilseeds are produced in plenty and exported in raw form. It would develop many small but important side industries like the paints and varnishes, soaps, oils, fats, waxes and manures. The industry satisfies all the conditions for protection and enjoys all natural advantages. What is needed is a duty on oilseeds to check exports and to allow the industry to grow.

Annual exports of raw hides, skins and leather account for crores of rupees in our foreign trade. They are returned in the form of tanned hides and skins and manufactured leather goods. The raw material, the tanning material, the labour—skilled and unskilled—and a secure market are available in this country and there seems to be no impediment in the way of this industry from being organised and developed. Even allowing for the religious sentiment of caste Hindus in touching the hides and skins, the labouring class provided by the professional castes of the Chamars and the workmen professing other faiths, is quite sufficient for the industry. The recent improvements introduced in the Ashrams at Sabarmati go to prove that the industry can be carried on under more healthy conditions and can do away, at least partially, with the dirty surroundings. Here is another scope for a decaying industry to grow.

Foreign dyes have killed indigenous vegetable dyes. If proper researches are made on the technique of the manufacture of dyes, it may yet be possible to retrieve lost grounds. The remains of the industry are found even today in the interior of the country where the dyer still prepares the indigenous colours, both fast and washable, for the local use.

These are some of the industries which need nothing but state attention and help in the form of protection against unfair foreign competition. In certain cases, it is the depreciating exchanges in Germany, the U.S.A., Japan and even England which are crushing the Indian industries. The fillip given by the Swadeshi Movement to some of the Indian industries was taken away by the high exchange ratio in India. The yen depreciated by more than 60 per cent and under-sold Indian cloth in Indian market bringing acute depression in the Indian cotton industry. Such cases have to be met by prohibitive duties or even prohibition against imports. Secret bounties and subsidies are responsible, in other cases, for under-selling some other commodities of home manufacture in this country. Remedy in all such cases lies with the state and no non-official attempt can succeed against such organised and well-planned efforts of other countries and governments.

APPENDIX I.

Table showing some of the important items of import and their value in 1936-37.

Articles.	Value (in thousand rupees).
Cotton manufactures	17,51,05
Fents	97,72
Apparel (excluding hosiery, boots and shoes)	83,09
Woollen manufactures	2,90,37
Silk and silk manufactures ...	7,15,98
Instruments, Apparatus and Appliances	5,36,49
Hardware	2,96,74
Chemicals	2,77,82
Provision and Oilman's stores ...	3,20,22
Paper and Pasteboard	2,93,11
Dyes	3,01,34
Rubber raw and manufactured ...	2,13,35
Sugar	23,91
Drugs and Medicines	2,09,66
Glass and Glasswares	1,27,92
Fruits and Vegetables	1,41,69
Paints and Painter's materials ...	96,83
Tobacco and Cigarettes	80,82
Stationery	76,33
Toilet requisites	67,25
Soap	26,86
Toys and requisites for games ...	43,53
Earthenwares and porcelain ...	46,92
Brushes and brooms	13,43

Articles.	Value (in thousand rupees).
Cement	18,80
Buttons	21,47
Liquors	2,39,63
Leather	51,26
Chinese and Japanese wares ...	8,79
Grain, pulse and flour	72,01
Gums and resins	23,11
Hair and manufacture of hair ...	2,28
Hides and skins	12,03
Matches	48
Boots and shoes	21,24
Cutlery	28,58
Bobbins	28,75
Umbrellas and fittings	19,40
Polishes	22,86
Furniture and Cabinet wares ...	21,50
Oils	3,17,48
Total	70,51,10

THE ROLE OF MONETARY AND INVESTMENT FACTORS IN TRADE CYCLES

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I

Nature of Trade Cycles.

Trade Cycles are those wave-like, rhythmical fluctuations of business, which form a characteristic feature of modern economic development. Each cycle comprises "that alternation of relatively prosperous and depressed times, together with all the concomitant changes in all parts of the economic system, which extends over the period of three to twelve years."[1] A cyclical movement means "that as the system progresses in, *e.g.*, the upward direction, the forces propelling it upwards at first gather force and have a cumulative effect on one another but gradually lose their strength until at a certain point they tend to be replaced by forces operating in the opposite direction; which in turn gather force for a time and accentuate one another, until they too, having reached their maximum development, wane and give place to their opposite . . . Also there is some recognisable degree of regularity in the time-sequence and duration of the upward and downward movements."[2] But, while the upward swing of the cycle starts as a slow and almost imperceptible process gathering momentum as it proceeds, the downward swing starts with a sudden jerk, violently shaking the entire economic machinery out of gear. And, finally, it is also a common feature of the trade cycle that the fluctuations in the capital-goods industries come earlier, last longer and show greater amplitude than those in the consumption-goods industries.

1 Harberler—Prosperity and Depression, p. 173.

2 Keynes—The General Theory, pp. 313-14.

It is, therefore, clear that the task of a theory of trade cycle will be to answer the following questions:—

(1) Why is it that the forces of expansion or contraction are self-reinforcing and cumulative in the sense that they override the equilibratory forces of demand and supply and tend to take the economic system further and further away from equilibrium?

(2) Why is it that the prosperity-phase or the depression-phase of the movement, as the case may be, after having gathered the momentum of cumulative, self-reinforcing forces for a while, comes to a halt and turns in the opposite direction?

(3) Why is it that capital-goods industries fluctuate more violently than consumption-goods industries in the course of trade cycles?

(4) Why is it that the upper turning-point at which the depression-phase commences is characterised by a sudden and violent explosion, called crisis, which is absent from the lower turning-point at which the prosperity-phase begins?

(5) What are the reasons for the average regularity of the time-phases of the cycle?

II

The Course of a Trade Cycle.

Before we attempt an explanation, we may sketch out the course of a typical trade cycle. Let us start with the depression-phase. When the financial panic has come and gone, there follows a period of liquidation of unsound concerns which had miscalculated the prospects of marginal net returns during the boom. At the beginning of the depression, therefore, there prevails a high degree of liquidity-preference: people's preference for cash as against goods and securities increases. The demand for both consumers' goods and producers' goods falls; security and commodity prices sag rapidly: profits disappear and give place to steadily increasing losses; investment and production, and consequently, the demand for the factors of productions, shrink. Money incomes fall, but with a time-lag in relation to the prices. Then follows unemployment, and money incomes fall still further. The fall of money incomes leads to a further fall of prices, and falling incomes and falling prices

drag each other down and thus start the vicious spiral of deflation. And, during all this while, stocks of goods in the hands of merchants and middlemen also tend to accumulate.

It will be observed that, given the initial crash, 'endogenous' forces are set into motion, which sustain and re-inforce one another in an inevitable chain of sequence, thus increasing the duration and amplitude of the depression. And these self-sustaining and cumulative 'endogenous' forces may be mitigated or strengthened by 'exogenous' forces such as political confidence or uncertainties, armament or disarmament programmes, good or bad harvests, or a secular trend caused by changes in the supply of gold or important inventions or technological changes.

In the meantime, there will be a parallel movement on the monetary side. At the turn of the cycle from boom to depression, there generally prevails a certain firmness in the money market, because, at the crest of the boom, the demand for investible funds ran ahead of the supply of money by the banking system due to limitations imposed by the gold standard, or it may be, due to conventional ideas of reserve proportions. The tightness increases still further during the ensuing financial crisis which inaugurates a period of liquidity-preference. But as the depression proceeds on its downward course, idle balances begin to swell. On the other hand, due to a rapid decline in the expectation of yield, the demand for investible funds shrivels up. While large cash balances lead the banks to lower the money rate of interest, the prevailing sentiment of pessimism among businessmen persists, and the expectations of prospective yield sink even below the zero point. Net investments fall at a progressive rate and ultimately become negative. And we have reached the bottom of the depression.

It will be noted that a regime of cheap money, by itself, *may not* prevent a depression. Because, while the prospective yield (which represents the demand-schedule) may fall to even below the zero point during the primary and secondary phases of the depression, the market rate of interest (supply-schedule) cannot fall to that point. Consequently, the period of stagnation will not be terminated and the upward phase will not begin so long as the expectations of yield do not improve.

Now, the accumulation of idle bank balances and private hoards and the liquidation of unsound positions (unless, of course, this is impeded for a while by pools, cartels and other artificial means) during the progress of the depression gradually create the forces of recovery. The low bank-rate *ultimately*

lowers the bond-rate of interest for long-term investments. Prices of gilt-edged securities rise, which is gradually reflected in a rise in the prices of common stocks on the Stock Exchange.[3] Rise in the prices of securities and stocks will raise the prospective yield of new investments on the one hand and enable businessmen to secure larger over-drafts from the banks on the other. Prices of capital goods will rise, and this will raise security prices still further, thus re-inforcing each other. As investments increase, there will be progressive re-employment of idle labour and idle resources. The additional investments *via* purchase of raw materials and payments to factors will become incomes in the hands of factors of production. The larger money incomes including profits and speculative gains will stimulate a rising demand for consumers' goods. There will be a progressive rise in the prices of these goods, which will further re-inforce the forces of expansion in the producers' goods industries.

In this upswing of the trade cycle, the psychological factors, too, play their part. Optimism rises to a fever heat and becomes infective. Investments along different lines are carried much further than would be justified by a reasonable calculation in a moment of coolness and the boom climbs to its crest.

But the process does not go on for ever. At the end of the first phase of the boom, it is believed, factors and intermediate goods and raw materials are fully absorbed at pre-existing or slightly higher rates. In the secondary phase, the supply of factors becomes inelastic, and money costs rise faster than profits. The banks, too, fearing the development of a runaway boom, follow the traditional policy of stiffening the terms of credit. Profits decline. The rate of progress becomes smaller and smaller. Further, during the secondary phase of the boom, due to increasing inelasticity of the supply of factors, expansion in some industries will be accompanied by contraction in others. In this way, the forces of expansion will have exhausted themselves. The economic machine is now placed on the sharp edge of a dangerous precipice. A small incident, such as the failure of a well-known business house or bank or a report of bad harvests or a rumour of war will give the necessary push, the forces of expansion will explode, and the economic system will be hurled down to its collapse. The cycle will repeat itself.

3 How a change in the bank-rate affects the bond-rate and the rate for long-term loans is discussed in Keynes' Treatise, Vol. ii, pp. 352—74, and Robbins' The Great Depression, pp. 39-40.

III

Monetary Factors and the Trade Cycle.

We have seen that once a boom or a depression is started, it releases economic forces which re-inforce each other and exercise a cumulative influence till a point arrives when there is a complete reversal of the movement. What part do monetary factors play in the genesis and development of this phenomenon?

A part of the answer, but only a part, is attempted by the theory of the natural rate of interest developed by Wicksell, Mises, Keynes[4] and Hayek. The natural rate of interest is that rate which equates savings and investments without any inflation or deflation. This might perhaps also be called the equilibrium rate of interest in a state of barter.[5] Now, the relation between savings and investments in this context may be explained as follows: Over a given period of time, there will be two parallel lines of activities in the economic system—one by income-receivers with regard to the disposition of their money incomes as between spending on the purchase of consumption goods and saving and investing in capital goods, and the other by business-men with regard to the distribution of given resources as between producers' goods and consumers' goods. The aggregate money income of the community is equal to the aggregate money value of the output as a whole. Now, so long as the income-receivers' expenditure on consumption goods is equal to the entrepreneurs' normal cost of production of consumption goods, and the former's expenditure on production goods is equal to the entrepreneurs' normal cost of production of those goods, the respective costs and prices of these two classes of goods will be in equilibrium, and the entrepreneurs, since they cannot derive any larger or smaller profits than in the past, will have no inducements to change the structure of production.

It follows that so long as the two sides of the equation move up and down *pari passu*, the proportionality and equilibrium of the system will not be disturbed. But, if for some reason or other, a change in the proportion between the production of producers' goods and that of consumers' goods were not matched by a similar change in the proportion between saving and spending, a disequilibrium will ensue, which will bring about a trade

[4] *Vide* Treatise on Money, where he adopts the Wicksellian analysis. But in his later work, The General Theory, Keynes has nothing to do with the natural rate.

[5] Cf. Wicksell—Interest and Prices, pp. 102—21.

cycle. Thus, for instance, if the proportional division of the money income of the community between saving and spending remained unchanged, while the entrepreneurs, say, increased the production of capital goods with additional funds from the banking system, there would be a rise in the relative prices of capital goods; and capital-goods industries would attract factors and raw materials from consumption-goods industries. But, those additional funds would presently become incomes *via* wages and payments for raw materials. And the income-receivers would reassert their will with regard to the distribution of their incomes between spending on consumption goods and that on production goods, so that the relative price levels would be restored to the former position; that is, prices of production goods would fall and those of consumption goods would rise. In consequence, raw materials and other unspecialised factors would be shifted from production-goods industries, and much new specialised machinery and intermediate goods in the former would be left high and dry. That is, a good deal of the new investments in capital-goods industries would collapse, and there would be a crisis to be followed by the familiar phases of the depression.[6]

This is how, according to Hayek, a disproportionality arises in the structure of production due to disparity between savings and investments on capital goods. And the cause of this disparity is the injection of more money into the economic system *via* loans to producers of capital goods. In terms of equilibrium economics, this is due to a disparity between the market rate and the natural rate of interest. When the former is lower than the latter, entrepreneurs borrow and invest more in capital-goods industries, and in the reverse case, they borrow and invest less, than the community has saved. And, in either case, a trade cycle is generated.

Now, the question arises as to why the disproportionality arising from a disparity between the market rate and the natural rate of interest should affect capital-goods industries first? The reason is that capital-goods industries require the investment of a much larger quantity of capital than consumption-goods industries. They are also, generally speaking, more roundabout. Consequently, the expectation of net profits in capital-goods industries is more immediately and in a larger degree affected by a rise or fall in the margin of difference between the market rate and natural rate of interest than is the case with consumption-

6 Hayek—Prices and Production, specially Chap. III.

goods industries.[7] This also explains why the tempo and the amplitude of fluctuations in the capital-goods industries are greater than those in consumption-goods industries.[8]

By reversing the arguments, it can be shown how a rise in the market rate of interest relatively to the equilibrium rate of interest will reduce the rate of investments relatively to savings, and thereby immobilise a part of the existing currency *via* 'sterilised' savings. This will be deflation. And it will, at first, depress the capital-goods industries, and gradually release the self-reinforcing and cumulative forces that will increase the tempo and the amplitude of the depression.

Thus, according to Wicksell-Mises-Hayek Theory, the monetary factors may be responsible for the phenomenon of the Trade Cycle by causing a disparity between savings and investments. And this theory might be called the monetary-investment theory of the trade cycle, because it attributes the trade cycle to the disparity between savings and investments brought about by fluctuations in the supply of money.

IV

The Role of Investment Factors.

From our description of the course of a typical trade cycle, we have seen that fluctuations of investments due to rise and fall of expectation of net profit (*i.e.*, prospective yield minus rate of interest) also play an important part in the genesis and development of the trade cycle. But, while the monetary theory of the trade cycle which we have discussed above assumes that, on the whole, monetary factors, *i.e.*, market rate of interest in relation to the equilibrium or natural rate, govern investments, and are, therefore, the ultimate causes of trade cycles, Mr. Keynes, in his General Theory, advances the hypothesis that it is the fluctuations of investments which lead the trade cycle movement both upwards and downwards. The hypothesis is based largely on the idea that the element of long-term expectations plays a large part in investments. But these expectations are highly unstable, because they depend partly on speculation and partly on spontaneous

7 Robbins—The Great Depression, pp. 36—38, and Haberler—*op. cit.*, p. 118.

8 This explanation is supplemented by the principle of acceleration and magnification of derived demand (Haberler—*op. cit.*, pp. 90—98, 205—10). Harrod in his Trade Cycle, pp. 53—64, explains the same thing by what he calls 'The Relation.'

outbursts of optimism and pessimism, and not on any mathematical calculation, whether moral or hedonistic or economic. And, since our moods of optimism and pessimism depend on our nerves and hysteria and even on the state of the digestive apparatus and weather conditions, we have here an element of great instability in our economic system.

Thus, a boom is produced because the expectations of net return from investments have been carried by errors of optimism much above what would have been reasonable on an approximate calculation of the probable net profit in a moment of coolness. And, when net profits show signs of falling off, contrary errors of pessimism lead to a total collapse of expectations of net profits, so that there is a sudden cessation of net investments. In Keynes' terminology, this expectation of marginal net profit is called marginal efficiency of capital, and the collapse of marginal efficiency of capital is the cause of the crisis.

But, why should such factors of irrational psychology, instead of causing an absolutely erratic movement, bring about rhythmical movement of the trade cycle? Mr. Keynes' reply is that so long as the existing capital goods are abundant, there cannot be any recovery of marginal efficiency. But, as through decay and obsolescence these capital goods become less and less, and scarcity of capital goods makes itself felt, the marginal efficiency of capital will begin to emerge from the state of collapse, and net investments and recovery will be started. Consequently, the depression will depend on the average duration of the capital goods. Moreover, the collapse of investments at the end of a boom leaves a large accumulation of surplus stocks of unfinished goods which take three to five years to be completely absorbed, before optimism may return and recovery begin. Thus, technical factors connected with fixed capital goods and stocks of unfinished goods are responsible for the regularity of the time-phases, specially of the depression.[9]

V

The Problem of Trade Cycle Policy.

We have seen that the starter of the upward phase or the downward phase of the trade cycle may be (*a*) monetary factors, or/and (*b*) investment factors, or (*c*) accidental or casual factors such as the failure of a big business or banking house or the

9 Keynes—The General Theory, pp. 149—63. 315—19.

discovery of gold-mines or bad harvests, etc. We have also seen that even though accidental or casual factors may start the cycle, it is only through the operation of the monetary and investment factors that the different phases of the cycle develop in an almost invariable sequence. It is, therefore, clear that if we can control the monetary factors and investment factors, we should be able to smooth out the curve of economic progress by mitigating, if not by altogether preventing, the trade cycle. The main objective of such a policy should be to reconcile the requirements of increasing productivity with those of stability of full employment.

What kind of monetary policy is calculated to achieve this duel objective of stability and progress?

Professor Hayek, by combining the Bohm-Bawerkian Theory of Capital with the Wicksellian Theory of the Natural Rate of Interest, has advanced the thesis that so long as money is neutral towards production and price-formation, rising productivity can be facilitated without the heavy incidence of the cyclical fluctuations.[10] But we suggest that the doctrine of natural rate on which Hayek builds his theory of neutral money is subject to serious limitations from the theoretical and practical points of view.

Now, so far as the theory of neutral money is concerned, his idea seems to be that so long as the market rate of interest is the same as the natural rate of interest, investment will be equal to savings. Consequently, the banking system will be called upon to supply just so much money capital to the entrepreneurs as is equal to the voluntary savings. In such a case, the new, longer, more roundabout structure of production will be based upon the voluntary decision of the income-receivers as to the disposition of their incomes between production goods and consumption goods. Therefore, once the transition from the shorter to the longer structure of production has been completed, there will be no further disturbance to the economic system. According to Hayek, it is only when, due to the reversal of the flow of monetary demand of the income-receivers from capital goods to consumption goods, the elongated structure has been shortened, that much specialised capital is left high and dry, and a crisis ensues. And such a reversal is bound to occur if increased investments take place through 'forced savings' *via* inflation.

But, the doctrine of natural rate is theoretically defective at its very source. For, the concept of natural rate could have any definite meaning if only we could isolate the natural rate

[10] Hayek—Prices and Production, Ch. III.

from the money rate of interest. Let us see if this can be done. The natural rate of interest is that rate which would bring about an equilibrium between what the community's savings and investments would be in the absence of money as an active force.[11] And the money rate of interest is that rate which is one of the governing factors that decide how much is being *actually* saved and how much is being *actually* invested. That is to say, both savings and investments, partly at any rate, are functions of active money. Moreover, the demand for, and supply of, investible funds as well as capital goods, depend on important psychological factors such as liquidity-preference and long-term expectations of yield on capital. And these psychological factors are also partly governed by money as an active force. Consequently, the twin concepts of natural rate of interest and neutral money are inadequate and even useless for analysing the processes of deliberate inflation and deflation which they are primarily designed to do. A better tool for that purpose would be the equilibrium rate of interest which would equalise the demand for, and supply of, investible funds in the money and capital markets. And this concept will also fit into the schema of demand—and supply-schedules introduced into analytical economics by Marshall.

Secondly, Hayek's analysis of the relation between savings and investments is too one-sided to be true to facts. He builds up his beautiful structure of the theory of normal development on the assumption that in the absence of money as an active force, savings would come first; that there would be a lower natural rate of interest; that this would induce investments in capital-goods industries which will lead to stable prosperity; but that if the investments run ahead of savings, *i.e.*, through inflation, a disparity between the two is bound to develop, which will lead to a collapse. But he makes no allowance for the fact that, just as increased savings will stimulate increased investments, increased investments, too, may induce new savings. For, increased investments lead to an increase of income, and increased income increases both the power and the will to save, specially over short periods.[12] Consequently, if investments run ahead of savings due to market rate being below the equilibrium rate (*i.e.*, deliberate inflation), there need not and in fact may not develop that disproportionality in the economic structure which, according to Hayek, is the cause of the collapse.

11 Cf. Wicksell—Interest and Prices, pp. 102, 120.

12 Cf. Keynes—The General Theory, pp. 96-97.

Thirdly, although Hayek shows what may happen to a boom caused by disparity between the two rates of interest, he does not discuss whether a market rate lower than the equilibrium rate cannot accelerate the pace of recovery from depression to a state of equilibrium with full employment. In fact, he starts with the assumption of equilibrium with full employment and does not discuss whether his theory of neutral money would answer the requirements of recovery.

Now, in a depression, income-receivers have a high degree of liquidity-preference (hoarding of cash), so that the supply-curve of investible funds from non-monetary sources (*i.e.*, dis-hoarding and new savings) moves to the left. On the other side, due to low expectations of marginal net return on investments, the demand-curve also moves to the left. Consequently, at the point of equilibrium, there will be a low level of investment, output and employment. In the extreme case, where liquidity-preference is infinite and expectations of net return are negative, net investments also will be negative. In such a situation, if the market rate is kept at the equilibrium rate, savings will become hoarding and thus bring about deflation. Here, undoubtedly, a lower market rate may overcome the liquidity-preference and increase the inducements to invest, and thus counteract the deflationary tendencies by converting hoarded savings into investments.

The appropriate monetary policy during a depression may be developed through successive stages. During the most acute stage of the crisis when liquidity-preference is infinite and net investments are negative, there should be inflation so as to counteract the private deflation. This can be done by the injection of new money among the consumers through gratuitous grants or relief of taxation. This will be facilitated if there is a large unemployment relief fund built up during the previous boom. Increased demand for consumption goods will raise the profits of consumption-goods industries. This may quicken the recovery of average expectations of profits in capital-goods industries as well by the principle of acceleration and magnification of derived demand. Simultaneously, there should be an easing of credit conditions and larger accommodation to member banks so as to increase their liquidity.

At the second stage, after the panic has subsided and liquidity-preference has been overcome to a small extent but not sufficiently for inducements for long-term investment to be revived, the tendency to hoarding should be checked by the issue of Treasury Bills on a fairly large scale. The rate for Treasury

Bills will be particularly low, because there are large liquid funds forthcoming for their purchase, and because the owners of these funds want to combine liquidity with security and a little profitability. With the proceeds of such Treasury Bills, long-dated public securities should be bought. The Central Bank also should simultaneously buy bonds in the open market. These operations would produce two results: On the one hand, they will increase the liquid resources of individuals, firms and member banks. On the other hand, they will raise the bond prices and thereby lower the long-period rate of interest on gilt-edged securities. The low rate of interest on bonds and the abundance of liquid funds in the market will soon raise the prices of common stocks and lower the supply price of funds for industrial investments, so that there will be a revival of expectations of net profit or what Mr. Keynes calls marginal efficiency of capital. If the shock to confidence is not an abnormally serious one, this simple measure of a low rate of interest for long-period loans should succeed in starting the process of recovery.[13] But, if the prevailing mood of pessimism is obstinate and deep-seated, an auxiliary aid to recovery would be public works expenditure on an appropriate, but not extravagant, scale. And since the long-term rate of interest is low, this will be a suitable time for developing public works. Large-scale conversion operations may also be carried out at this stage, so that the inevitable budgetary deficits may be reduced. This will also materially assist in the revival of general confidence, which is so essential to business recovery.

In connection with public borrowings and public works expenditure during a depression, Professor Robbins, who approves of such a policy, makes an interesting suggestion. He rightly points out that a balanced budget (on revenue account) is a *sine qua non* of public confidence which is indispensable for recovery. But the difficulty is that in a depression government revenues tend to fall while government expenditure on public relief tends to increase, so that there is invariably a budgetary deficit. On the other hand, in a boom government revenues are up while there is no expenditure on public relief, so that there is a budgetary surplus. He, therefore, suggests that the surpluses of boom years should be hoarded in order to make up for the deficits of the depression period. This way of making 'good

13 Incidentally, this was exactly the monetary policy followed in England in the recent depression. (See Monetary Review for 1935-36 by the League of Nations, pp. 10—26).

times pay for the bad' would stabilise the budget. Furthermore, it would have the advantage of damping down expansion in a boom through Government hoarding and, again, of checking contraction in a slump through Government dishoarding.[14]

We may now pass on to discuss what should be the monetary policy in a boom. It is essential, first of all, to distinguish a recovery from a boom. There is now a fairly large amount of agreement among different schools of monetary theory that a recovery will have been completed when the elasticity of the supply of factors of production including raw materials has declined to zero, so that any further expansion beyond that point would mean rising costs and rising prices leading to a vicious spiral of inflation, which will soon end in a crash. Consequently, it is generally suggested that the incipient boom should be nipped in the bud by stiffening the market rate of interest.[15]

If this view of the matter were correct, the problem would be how to stabilise a semi-boom with full employment of the factors, without allowing it to develop into an excessive, runaway boom. And the solution of the problem would consist in so regulating the monetary factor as to convert the equilibrium of the semi-boom into a long-period trend. The implications of such a policy would be (*a*) progressive rise in productivity and (*b*) constant full employment with at least a proportional rise in real incomes. The nearest approximation to such a policy would be a constant money rate of income in the face of slowly increasing productivity and slowly falling costs and prices. In such a case, the effective supply of money need only increase in proportion to the growth of population. Thus, it would appear that when we have arrived at that stage of recovery where there is an equilibrium with full employment of the factors of production, it could be stabilised by what Hayek calls a constant supply of money. Indeed, as already stated, it is on the assumption of such an equilibrium that Hayek analyses the conditions of continuous progress of the economic system. But, even if the doctrine of a constant supply of money were theoretically sound as a remedy against cyclical fluctuations, its practical application

14 See Robbins' article on 'How to Mitigate the Next Slump' in the LLOYDS Bank Monthly Review, May, 1937. Such a principle is illustrated, though in a small way, in the case of the Indian Famine Insurance Fund.

15 This view is supported not only by Robbins in the article quoted above but also by H. D. Henderson, who belongs to the opposite school of thought, in his article "The Monetary Problem" in the LLOYDS Bank Monthly Review, December, 1936.

is subject to so many serious limitations that he is himself constrained to say that its practical value is a negative one.[16]

But this diagnosis of the boom is inadequate and imperfect, and the remedy prescribed is equally unsound. For, what is called a boom according to current view is an excessive investment in only a small part of the economic system, such as railways or iron and steel or engineering works. When the limited supply of specific factors in these industries becomes inelastic, costs rise, then prices rise, and the two push each other up, till the marginal efficiency of capital falls and investments tend to collapse. If at such a time, the rate of interest is raised and credit is stiffened up in other ways, the collapse will be quicker and larger, but it will also involve the other industries as well in a common fate before they have a chance of full development. Consequently, the proper means of preventing the collapse and the subsequent depression would be to maintain a low rate of interest and not raise it. A low rate of interest maintained for an indefinite period may also serve to spread the tendency towards fuller and fuller recovery from industry to industry so as to cover the entire area without the possibility of dangerously excessive development in any particular sector of the system. For, it is an admitted fact that during a recovery, some industries progress faster, others less fast, a third group slower still, and so on in a whole series of gradation.[17] The industries that go up first and fastest will, after the point of full employment of the specific factors, encounter an effective check in rising costs due to greater and greater inelasticity of the specific factors. Their rate of progress will become smaller and smaller. The next period of development will be associated with the second grade of industries. Next third, and so on for a fairly long time. But, if this continuous semi-boom can be kept up by a low rate of interest for a sufficiently long time, fresh supplies of both specific (such as highly specialised machinery and labour), and non-specific factors (such as minerals, unskilled labour) will be called into existence, and in the order in which the grades of industries would require them for a fresh lease of development, because of differential margins of rates of remuneration. In this way it would be possible, as Mr. Keynes hints,[18] to perpetuate

16 Prices and Production, second edition, 1935, p. 125.

17 The series of gradation may be illustrated as follows: first, iron and steel and engineering works; second, consumption-goods industries; third, house building; fourth, irrigation and drainage works; fifth, roads and public buildings, etc.

18 Cf. The General Theory, p. 321—24.

a semi-boom through a low rate of interest rather than a semi-slump which is calculated to result from the high bank-rate policy advocated by Hayek[19] and his school.

If our analysis is correct, it would follow that the maintenance of a low rate of interest and easier credit conditions would go a long way in keeping up a semi-boom for an indefinite period. But, as we have seen, fluctuations in the state of long-term expectations, which constitute a major factor of trade cycles, depend not only on the long-term rate of interest, but also on the irrational mass psychology of the entrepreneurs as a body. The great instability of this psychology may have been due to the cyclical fluctuations of the past decades or it may be inherent in the *laissez-faire* regime itself, or both. In so far as it is born and bred in the climate of trade cycles, the mitigation of trade cycles through a low rate of interest should tend to eliminate it to a certain extent. But, in so far as it is due to the play of the narrow, egoistic and essentially short-sighted motives of the individualistic-competitive system, its successful elimination would require that investments should be based on rational, long-range calculations of prospective yields against the background of a comprehensive perspective comprising the entire range of investments. The fulfilment of this condition would imply a large degree of State regulation and control of investments and, in the last analysis, perhaps a system of Collectivist Economic Planning.[20]

19 Cf. Prices and Production, p. 125, where he says " save in an acute crisis, bankers need not be afraid to harm production by overcaution."

20 Cf. Keynes—The General Theory, p. 164.

J. M. KEYNES AND THE TRADE CYCLE

BY

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J. M. Keynes's book "The General Theory of Employment, Interest and Money" has already received a considerable amount of attention at the hands of his fellow economists and most of it has been unfavourable. The book which for its author has been a 'long struggle for escape' has only caused greater divergence of opinion between fellow economists and certainly not contributed to restore 'the practical influence of economic theory' which, according to Keynes, has been almost destroyed by the lack of authentic agreement among economists. The fact that the book has been hailed by socialists like Laski, Cole and Rowse as an epoch-making work and its arguments used by some of the most ardent disciples of Keynes in support of policies repugnant to reason and commonsense both from the orthodox or unorthodox standpoints, has not gained for it or economic science the authority which it is the object of Keynes to re-establish. The debate, which he has initiated for resolving the issues involved in the fundamental concepts of Economics, has not been lacking in substance or animation; but its result has neither enhanced the prestige of economists nor contributed to any appreciable extent to the clarification of the issues.

It is not the purpose of this paper to give a general review of the main argument of Keynes's book which, whatever its faults, is, it must be admitted, a brilliant performance and worthy, like all that Keynes writes, of most serious consideration. It is proposed to limit the scope of this paper to a brief examination of Keynes's views on Trade Cycles. Those views are, as the readers of Keynes's book know, contained in his Note on the Trade Cycle. Every element in his analysis of his Theory of Employment is involved in the explanation of this most baffling phenomenon of our economic life and in particular, as he says, 'fluctuation in the propensity to consume, in the state of liquidity preference and in the marginal efficiency of capital' all play a part. But according to Keynes the essential character of the Trade Cycle, its regularity of time-sequence and of duration, is mainly due to the way marginal efficiency of capital fluctuates.

The cyclical change in the marginal efficiency of capital is the major cause of the Trade Cycle in his opinion and to it are to be attributed the most disconcerting features of our economic system which, more than anything else, have exposed it to such severe criticism at the hands of its opponents and made the task of defending it against those attacks a matter of extreme difficulty for its supporters.

A theory of the Trade Cycle has, as Keynes rightly points out, to account for a succession of events occurring in a regular and rhythmical order. It must, in the first place, explain why the economic system in the phase of its operations known as the boom is propelled upwards through a cumulative process of self-acceleration, losing strength as it works up full steam until it comes to a point at which it takes a sharp and violent turn and is replaced by the opposite phase of recession known as the depression. Recession is also self-accelerating, gathers force on its downward course until what Harrod calls the bottom is reached which marks the beginning of recovery, the upward ascent of the system to the giddy heights from which it is once again hurled down and is carried by its own momentum to the ignominious position from which it had risen. In other words, the Theory of the Trade Cycle must afford an adequate explanation of why the economic system, not in one country but all over the world, swings from one extreme to another periodically involving all the stresses and strains of which we are all so painfully aware owing to our recent experience of this extremely damning phenomenon.

The question which we have to answer is "Does Keynes's theory provide this explanation?" According to him, it does. Let us, therefore, first outline the theory itself. Keynes begins with the later stages of the boom, onset of the 'crisis,' the sharp and violent turn from upward to downward phase of the Trade Cycle. The later stages of the boom are characterised by unduly optimistic expectations as to the future yield of capital goods based on very precarious foundations. These expectations determine the marginal efficiency of capital—nay they are the marginal efficiency of capital. A rise in the rate of interest aggravates and at times initiates the crisis but in the main is not its cause, which is the sudden collapse in the marginal efficiency of capital itself. In a world in which speculation, *i.e.*, 'the activity of forecasting the psychology of the market' dominates over enterprise, *i.e.*, 'the activity of forecasting the prospective yield of assets over their whole life,' it is of the nature of things that 'disillusion falls upon an overoptimistic and overbought

market with sudden and catastrophic force.' It is not rise in the rate of interest which upsets the apple cart, but a doubt welling up presumably from the hidden depths of the collective unconscious, if the psychologist will admit the existence of such an entity—the doubt which once begun spreads and causes all the havoc that is associated with the general stampede known as *crisis* or if the use of a word very commonly used in the old literature on the subject but not used by Keynes or in recent literature, is permitted, *panic*.

As soon as the crisis is over, there begins the slump which again is 'determined by the uncontrollable and disobedient psychology of the business world.' The return of confidence is the essential condition of recovery and that is 'insusceptible to control in an economy of individualistic capitalism.' Purely monetary remedies are of no avail for reviving confidence and, therefore, the marginal efficiency of capital. The rate of interest cannot fall below a certain minimum which, according to Keynes, is 2 or 2½ per cent but the collapse in the marginal efficiency of capital is so complete that even at that low rate of interest there is no demand for investment; and unless the rate of interest becomes negative, it cannot be made a measure of recovery. That being impossible, the monetary authority has merely to look on until the forces, which reverse the tide, have spent themselves and the business community is again in an enterprising or speculative state of mind and can bring itself or rather be brought to take a less pessimistic view of the prospective yield of capital. The change, when it comes, starts almost imperceptibly but accentuates itself and carries business to the peak of frenzy from which it is pre-destined to fall again.

What about time element in the trade cycle? Why do the events move in orderly sequence and have a certain order of duration? On this point Keynes turns for explanation from subjective factors to objective facts. The objective facts which determine that the duration of downward movement should have 'an order of magnitude which is not fortuitous' and 'shows regularity of habit, let us say, three to five years' are the length of life of durable assets in relation to the normal growth of capital and the carrying costs of surplus stocks. The duration of slump has a normal relation to the length of life of durable assets and to the normal rate of growth in a given epoch because an interval of time must elapse before capital, the marginal efficiency of which at the outset of the slump is low, negligible or even negative, becomes so obviously scarce through use, decay

and obsolescence as to increase the marginal efficiency of capital and, therefore, to lift the depression.

It is convenient to interpolate here two obvious considerations before Keynes's view regarding the influence of carrying costs is introduced. Keynes speaks of epoch as if the length of life of durable assets in relation to the normal growth of capital has been and is, broadly speaking, about the same in all countries of the world. Are all countries living in the same epoch so far as this particular point is concerned? The obvious answer is that they are not. Though statistics on this point are not available and not easy to obtain, it is a matter of empirical knowledge that the relative importance of durable assets and the normal rate of growth of capital vary within a wide range in different countries of the world. Since the order of magnitude of industrial fluctuations is, with some notable exceptions, almost the same all over the world, the disparity in the normal rate of growth of capital, if the latter is one of the two efficient causes of the periodicity of fluctuations, cannot be reconciled with synchronization and almost identical duration of the trade cycle.

The other consideration is that in order to explain the 'regularity of habit' it is not only the duration of downward movement which has to be accounted for but the duration of the trade cycle as a whole which, of course, includes the upward movement as well. The trade cycle has to be reckoned either from peak to peak or bottom to bottom, whichever starting point is convenient for the purpose of exposition, but in either case it must include the ascending phase of the cycle. Even if the length of life of durable assets in relation to the normal rate of capital is an explanation of the order of magnitude of the duration of downward movement, it is not an explanation of the duration of the cycle as a whole. Now what is the explanation of the duration of upward movement which experience shows is no more fortuitous than that of its reverse? Keynes in the Note does not deal with that point at all; and the other writers who have attributed to the life of durable assets periodicity of the trade cycle are equally unconvincing on that point. Need I add that if the rhythm of the upward phase of the trade cycle is not explained, the cardinal feature of the trade cycle as a whole, *i.e.*, time-element, remains unexplained, a sphinx of economic theory and of contemporary economic life which both challenges all students and frustrates their efforts to solve its riddle?

One word more has to be added before the next point is considered. Keynes suggests the depression lasts for three to five years owing to the fact that about that period is needed before

shortage of capital creates sufficiently obvious scarcity to increase the marginal efficiency of capital. Keynes in the Note does not undertake an examination of facts and, of course, could not be expected to do so. But it is evident the facts in support of this hypothesis have to be cited before it is accepted as a working explanation for theoretical discussions. There may be available facts which lend support to the view urged by Keynes, but their sources are not referred to by him in this book and I, for one, am not aware that they exist. Keynes mentions obsolescence as one of the factors on which the average life of capital goods depends. As obsolescence is a function of new inventions with regard to which any regularity of habit cannot be posited and is of growing importance in this epoch of incessant changes in the methods of production owing to the rapid advance of applied science, the average durability of capital itself is becoming increasingly a factor of uncertain magnitude to which it is difficult to ascribe any rhythmical changes in the working of our economic system.

The comments made in the three preceding paragraphs are in place in this paper but anticipate its conclusions and are to be taken in the nature of interpolation inserted for the convenience of treatment. The other time-factor, according to Keynes, is due to the carrying costs of surplus stocks which force their absorption within a certain period. The advent of the slump finds the business community saddled with a large surplus of unfinished goods, which become for the time being unsalable, owing to the sudden cessation of all new investment. The carrying costs of these stocks are heavy and make it necessary for their owners to sell them at the low prices which prevail during the depression. The process of their disposal, however, takes time which is neither too long or too short and extends again over three to five years. The clearance of these stocks is negative investment which makes the slump more acute for a time but when it is over scarcity of 'liquid capital' also becomes sufficiently obvious to increase the marginal efficiency of capital as a whole and sets in motion the wheels of industry once again.

Accumulation of stocks is a common feature of depression and an obstacle to recovery; but Keynes does not give any facts in support of the assumption that three to five years are necessary for their clearance in all countries and in all depressions. The fact that when the depression is lifted the stocks are generally low and their depletion is a necessary condition for the start of the upward swing does not show that it is in the nature of things that clearance of stock should, as a rule, take the period generally associated with the downward phase of the trade cycle.

Accumulation of stocks and their progressive depletion are the indices of the course of events, but it is an unwarrantable assumption to attribute to them causal power in the determination of the time-element in the trade cycle. That in all countries and in all depressions the accumulation of stocks and the rate of their depletion should be the same and that because carrying costs are 'seldom less than 10 per cent' would involve a series of coincidences which, taking into account the difference in condition, economic structure and rates of interest of different countries, cannot but be regarded as more than improbable.

Besides the question of time element in the trade cycle, it is necessary to say a few words about Keynes's central point that the trade cycle is due to the collapse of marginal efficiency of capital. The marginal efficiency of capital is, according to Keynes, the ratio between the supply price of capital and its prospective, as distinguished from current, yield in its lifetime. The emphasis on prospective introduces the element of anticipation or expectation—the word which Keynes uses and favours. Expectations are highly elusive phenomenon and as a guide to economic conduct involve the operation of factors, which are both various and varying, but have one common feature and that is that they are not, and from the nature of things cannot be rational. That is the view of Keynes and he sets it forth, in two chapters of the General Theory, *viz.*, 12 and 13—which are, by general agreement, the most brilliant chapters of the book. They, taken together, present in the short space of 29 pages an indictment of the present economic system which, coming as it does from the pen of one who has formulated his views not to urge 'a terrific encroachment on individualism' but to point the way 'to avoid the destruction of existing economic forms in their entirety' and provide 'the condition of the successful functioning of individual initiative,' may give unmixed satisfaction to even the most uncompromising opponents of the present economic system, but cannot but embarrass its supporters.

The marginal efficiency of capital being primarily based upon expectations is, according to Keynes, only remotely related to what he calls genuine prospective yield of the stock of capital. The static assumptions of the classical theory are untrue of the modern world, for the best brains of to-day are engaged not in forecasting what the real prospective yield of investment is going to be but in 'anticipating what average opinion expects the average opinion to be' so much so that, 'capital development of a country becomes a by-product of the activities of casino' and enterprise 'a bubble on the whirlpool of speculation.' There

is very little, if any, relation between socially advantageous and commercially profitable. The result is due to the knowledge for rational forecasts of investment-yields having an exceedingly precarious basis, being mainly based upon the convention according to which the identity of prospective and current yields is assumed—'the usual practice being to take the existing situation and project it into the future.' This leads to the present investment markets presenting a spectacle in which the business-men play a mixed game of skill and chance and the issue depends upon a battle of wits in which the success comes to those who can outwit others and take advantage of 'ephemeral and non-significant facts,' to which the dark forces of mass psychology give excessive importance, 'to pass the bad or depreciating halfcrown to the other fellow.' Cold calculations practically do not exercise any decisive influence and decisions are taken 'as a result of animal spirits—of a spontaneous urge to action rather than in action and not the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities.'

In a world in which the future is unpredictable and no guide to action and the present is dominated by 'stock-minded' people who want quick returns without any regard for the real interests of the community, it is no wonder that collapse of the marginal efficiency of capital occurs and mankind as a whole passes through the distressing phenomenon of the trade cycle. We are in the grip of malignant forces which render the task of rational adjustment of resources to needs well-nigh impossible and the exciting game of Snap who snap can is played to the benefit of a small minority and the undoing of millions who through losses and unemployment are exposed to risks of the gravest kind which they can neither avoid nor control.

The above is a fair though very much, for want of a better word shall I say, dimmed—for I cannot pretend to emulate J. M. Keynes's brilliance of style and treatment—account of Keynes's theory of the Trade Cycle. According to it, it is clear, that industrial fluctuations are a very intractable phenomenon, their course being mainly determined by the state of confidence born of economic fiction that the future is more or less going to be like the present and recent past so far as returns from capital investment are concerned. Actual results seldom, if ever, correspond to initial expectations. This makes economic life extremely unstable. Men can forecast what is ahead in the short period, but long-term expectation has 'no strong roots of convictions to hold it steadily' and is 'subject to waves of optimistic and pessimistic sentiment, which are unreasoning, and yet in a sense

legitimate, where no solid basis exists for a reasonable calculation.'

This may be so. I, for one, find myself in full agreement with Keynes's view on this point and regard rational investment based on long views outside the competence of individual investors or entrepreneurs. The development of the corporate form of enterprise and, therefore, 'liquid' investment has, Keynes has very rightly stressed, accentuated the tendency to regard a state of things, *i.e.*, investment in specific capital goods—as fluid and, therefore, not amenable to any long-term measure of rational control which is actually very much fixed for the community. But the crux of the matter, so far as the theory of the Trade Cycle goes, is not that there is instability in economic life but this dangerous instability is not fortuitous. The most bewildering aspect of the whole matter is as to why an 'outcome of the mass psychology of a large number of ignorant individuals' is liable to change not merely violently but rhythmically. Why is there method in this collective madness?

We are here in the realm of the mind—a sphere in which the economist may be expected to make room for the psychologist, make all the relevant facts available for the latter and wait until he provides a cogent and consistent explanation of these social and, therefore, economic convulsions. The psychologists like Von Bon and Macdougall have attempted to link up their respective theories of crowd or group mind with the alternating periods of booms and depressions, but the sum total of their expert reasoning amounts to saying that optimism and pessimism are highly infectious and they spread, as all irrational hopes and fears do, through a process of social interpenetration. The argument of Keynes, I am afraid, takes us no further. We are, we know, subject in mass to waves and gusts of unreasoned elation and depression, and economic life being essentially social is, owing to the development of integration in various forms, governed by forces which make mass mind such an important, and in so many cases, such a decisive factor in shaping the course of events, both individual and collective—particularly the latter. That may be, in my opinion is, a strong argument for substituting social decision for individual judgment in all matters of vital importance to the community; but is not at all an illuminating explanation of the Trade Cycle. It does not help us to understand its recurrence with such disconcerting regularity nor throw any light on what the events show to be its increasing intensity.

J. M. Keynes's remedies for the Trade Cycle are the same as his remedies for the ills of the economic system itself, for the

former is only an acute indication of the inherent precariousness and irrationality of the latter. The outstanding faults of the existing economic system, according to Keynes, are 'its failure to provide full employment and its arbitrary and inequitable distribution of wealth and incomes.' These faults he proposes to remove by keeping the rate of interest low through correct banking policy, re-distribution of wealth and income through a scheme of steeply graduated taxation of incomes and inheritances and social control of investments. The rate of interest may not be the price of waiting, but dehoarding, but it can, as Keynes himself admits, exercise only a passive influence over investments which are in reality governed by processes which are 'by-product of the activities of casino.' Steeply graduated direct taxes are an instrument of the re-distribution of wealth, but the writer who believes that they can create a system which will, together with the rate of interest kept deliberately low, lead to the 'euthanasia of the rentier,' must be living in a very real unreal world of his own. The rentier class is not and cannot be content with, to use Keynes's own words, tyrannising over their bank balances. They are in control of all levers of authority and will not submit to the process which J. M. Keynes pins his faith on. The development of graduated taxation in the last fifty years has not led to any considerable rise in 'the propensity to consume,' and 'the dangerous human proclivities' instead of being 'canalized into comparatively harmless channels' have been canalized in channels which threaten the peace of the world and probably the future of civilization.

Keynes has made a very good case of social control of investments. When forecast of genuine prospective yield of capital becomes impossible for the individual investors and the best brains of the community are occupied in passing the depreciating coin to the other fellow, the only way to secure correspondence between the needs of the community and the investment of capital is to make a public authority or public authorities responsible for determining the forms which investments will take and not to be deterred from extending them merely because mass mind is irresponsive to the real needs of the community. Keynes, I am afraid, underestimates the importance of and to a certain extent misconceives the reasons which account for the scarcity of capital. In poverty-stricken countries like India the scarcity of capital is primarily due to the absence of savable surplus and there is as much intrinsic reason for it as for the scarcity of land. But Keynes is right in putting greater reliance on communal savings or savings in the hands of social agencies;

and the control of investments with a view to maintaining the level of investment indicated by the need for development and for providing full employment is an economic and social necessity.

Keynes, however, expects that this control can be provided without sacrificing the advantages of efficiency and freedom which accrue from the decentralization of decisions and of individual responsibility. We may all agree that efficiency and freedom are priceless assets and should be preserved; but it is very doubtful that when the control of investments is compatible with the decentralization of decisions and of individual responsibility in their present form. When functionless investors pass away and investment of capital becomes a public function, a great deal more will happen than merely setting up an authority for drawing up a national budget of capital accumulation and investment.

Keynes sees the rentier aspect of capitalism as a transitional phase which will disappear when it has done its work. But in his opinion and in the opinion of a growing section of the people all over the world it has already done its work. How is this aspect of capitalism to pass away? Granting that it will if Keynes's remedies are applied, who is going to apply them? Not the rentier class themselves. They are not going to commit *harikari* and work for their own 'euthanasia,' and as they are in power and from all appearances have no intention of abdicating it or being forced out of it, they will not keep the rate of interest low, tax 'the arbitrary or inequitable' inequalities of incomes and wealth out of existence or devise and enforce a scheme of social control of investments.

The fate of the proposal of the Liberal Industrial Enquiry Committee in Great Britain aiming at the introduction of social control of investments illustrates how Keynes's proposals have no chance of being implemented under the existing conditions. The Committee proposed the formation of an Investment Control Board to regulate the influx and distribution of fresh capital, but all proposals bearing even a remote resemblance to the original proposal have been summarily dismissed by the Government of the rentier class which has been in power in Great Britain since 1931 as socialistic and therefore absolutely unacceptable. If Keynes believes that a far-reaching measure like social control of investment will be willingly accepted by the class which now controls investments and is in authority, his faith does him credit as being based upon ideals which deserve to succeed but is not supported by the contemporary facts.

Keynes's charge against the classical theory is that its tacit assumptions are seldom or never satisfied with the result that it

cannot solve the economic problems of the modern world. It may be possible to admit that Keynes's charge is well-founded; but one wonders whether his own assumptions fit the facts any better than those of the classical theory and the General Theory can solve the economic problems of the modern world. The world whose problems it has to solve, is full of forces 'which find it easy to work on the natural bellicosity of the people.' Keynes wants nations to learn 'to provide themselves with full employment by their domestic policy' and 'attain equilibrium in the trend of their population' to resolve and reconcile all international conflicts. This is not only a counsel of perfection, but also a counsel which most countries will find it impracticable to act upon. Germany and Italy are pursuing blatantly the line of action advocated by him and the other countries have, in varying degrees, been drawn into the autarchical orbit; but the result has, as we all know, not been the appeasement of the world. National planning means, as pointed out by Aldous Huxley in his latest book, international anarchy. In the pursuit of domestic policies with a view to provide full employment nations, instead of removing the causes which 'set the interest of one country against that of its neighbours' have brought the world perilously near its doom and made wholesale destruction an imminent reality.

But what is more germane to the argument of this paper is that in a world torn by intolerable strife Keynes proposes to solve the problems of employment by a programme the most outstanding feature of which, so far as the immediate future is concerned, is expenditure on public works which, through the operation of multiplier, is expected to provide means to prosperity and, therefore, to employment. The contemporary mood which makes 'people unusually expectant of a more fundamental diagnosis' may be a disease or symptom of a disease; but one may be pardoned if one likens Keynes's conclusion to the proverbial frantic efforts of a drowning man catching at the straw.

Keynes is very keen, as he himself tells us, to avoid the destruction of existing economic forms in their entirety. But mad men in authority, who are hearing voices in the air, will not be deterred from the mad pursuit of their policies by 'the gradual encroachment' of Keynes's ideas. We are living in a world in which forces have to be mobilised to counter effectively the designs of those who, moved by forces deeper and stronger than themselves, are on the eve of plunging the world into chaos. And what is more, the forces have to be brought into action in a very short run. If we are to wait until the gradual encroachment of

ideas produces the desired results in the long run, the position will become irredeemable and those, who survive it, will possibly stumble on the measures of redemption through the course sketched in Wells's *Shape of Things to Come.* Of the world to-day it is true that in the long run, not only we all, but the world as we know it, will, if I am permitted to press into service one of Keynes's most brilliant hits, be dead.

I may be excused if I seem to have digressed from the discussion of Keynes's views on the Trade Cycle to that of his whole economic philosophy. But the digression is more apparent than real. As stated above Keynes uses his whole theory to explain the Trade Cycle and every element in his analysis is involved in his explanation. The Trade Cycle is only an undulatory movement of the economic system as a whole. Keynes recognising the fact proposes to eliminate its disturbing effects by measures calculated to impart soundness and stability to the system itself. Those measures, I may repeat, will not remedy the ills of the economic system and, therefore, will be equally ineffectual as remedies of the Trade Cycle.

This conclusion has been borne in upon me as a result of an earnest effort to get light from Keynes on this and other vexing issues of economic theory. That I have not received it may be entirely my fault; but if that is so, my failure and disappointment are not due to any lack of appreciation on my part of Keynes's exceptional gifts of understanding and exposition. In the General Theory it is quite clear a master mind is at work seeking a way out of the bewildering contradictions of our times by releasing himself from the cramping effects of the theories upon which he and men lesser than him have been brought up for generations, and by putting in their place a conception of economic life and its working with reference to which the economic problems of the modern world can be solved.

At places it appears that he almost strikes the vein and a rich deposit is at hand. But the impression which one gathers from reading his book or at least the impression which I have gathered, is that 'long struggle for escape' of which he speaks in the Preface, is not yet over for him. He seems to be passing, to use the equally expressive phrase of Rowse, through dark night of the soul. When the struggle is over and the dark night has passed away, unto him full enlightment and unto the students of Economics and through them to the distracted world something corresponding to the noble eightfold path may yet be vouchsafed.

Keynes has already very valuable original contributions to his credit; but it may be that his most valuable contributions

have still to come. What they will be one can get a glimpse of in the flashes which abound in the General Theory. But the picture is neither clear nor complete. For that we must wait till the gifted author of the book is fully through the process of self-emancipation. Let us hope that we will not have to wait long or so long that the light when it comes finds the world enveloped in a darkness in which the light will be of no avail.

In conclusion I feel tempted to say a word about the many articles which have been written on Keynes's theory by learned economists in the journals of learned societies. In this paper I cannot find room even for a passing reference to these essays in criticism. But by reading them the appropriateness of what two prolific writers—though prolific on very different levels of achievement have said about the economists as a class has been forcibly brought home into my mind. One of the two writers is Paul Einzig who speaks of 'the Indian Reservation of the Universities where the surviving specimen of 19th century economists are kept artificially alive carefully guarded against any breath of reality. The other is H. G. Wells himself who has said that the economists 'have produced a literature 10,000 times as bulky, dreary and foolish as all the outpourings of the medieval schoolmen.' H. G. Wells has obviously committed himself to this statement in a very ungenial mood; but the comparison of the economists with the medieval schoolmen is noteworthy. Most of the arguments urged against Keynes by his critics appear to me casuistical in the extreme and bear upon them the stamp of having been penned by erudite scholars untouched by any breath of reality. I have only to add that Keynes, whatever be the flaws in his arguments, is vividly alive to the real issues with which we are confronted. His critics are not. This is a strange conclusion of a paper which is also an essay in criticism. I shall leave it at that and wish the delegates of the Conference joy of the humour of the situation.

MR. HARROD ON THE TRADE CYCLE

BY

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The object of this paper is to discuss Mr. Harrod's theory of the trade cycle in its proper setting alongside of other theories and to evaluate his contribution to the subject. The measure of agreement during the last 15 or 20 years on the nature and causes of the trade cycle has, despite different ways of approach, substantially increased, but the differences that still exist between the various theories invest the problem with great interest. Although Mr. Harrod has necessarily laid great stress on those points at which he has departed from others, a critical examination of his view will enable one to perceive that his theory is eclectic, that he has taken into his theory a number of widely held ideas and that the main interest of his contribution lies in the way in which he has focussed thought on his Relation and the Multiplier.

That the trade cycle is a phenomenon which affects the economic system as a whole and not merely particular branches of economic activity and is subject to characteristic rhythm is now well known. Mr. Harrod, like all others, holds the view that there are two aspects of the trade cycle which would give the key to the causes therefor. There is widespread empirical evidence that rising prices are associated with increasing activity and falling prices with diminishing activity, although theoretically one might expect the contrary phenomena. The general level of prices depending on the relation between the size of the stock of money available for use and the flow of goods which it has to be exchanged against, a more rapid increase in the flow of goods should result in the fall in price level. The velocity argument too does not explain the paradox of the rising price level during boom and the falling price level during slumps. Hence no theory can be regarded as complete which fails to give a satisfactory explanation of this apparent paradox, and the explanation in its broadest aspect must necessarily be monetary, dealing as it must, with changes in money and its velocity. But between the purely monetary explanation of the trade cycle given by Hawtrey, for example, and the non-monetary school represented by Spiethoff and others, Mr. Harrod takes an intermediate position. Indeed he goes further and states that " the set of ideas to which

the doctrines of this essay are most repugnant are those connected with the quantity theory of money." In reality, however, his theory can be made to fit in with the general theory of money and as he himself points out (p. 126) though he has no separate theory concerning velocity of circulation his doctrine of trade fluctuation is itself the theory of velocity. "Those forces which have been enumerated govern the volume of output and the level of prices; these in turn cause the quantity of money multiplied by velocity of circulation to be what it is." He accepts that velocity is the resultant of banking policy which determines the quantity of money and of the forces enumerated. While in the opinion of the monetary school the banking system has it within its power to ensure that prosperity could be prolonged and depression staved off, Mr. Harrod thinks that the banking system far from having that ability performs only a most important technical service in concentrating and canalising the savings of the community. It is not, according to him, within the power of the banks to provide the means of investment when there are no savings available for the purpose apart from the banks. The point is further considered later.

The second fact which is both universally noticed and accepted is that fluctuations in capital-goods industries are much more violent than in consumption-goods industries. The relation between the demand for consumable goods and that for capital goods has been noticed by several writers, but according to Harrod, not nearly sufficient importance has been attached to it. On the contrary, as will be shown below, the differences in the fluctuations in capital-goods industries and consumption-goods industries lie at the root of all over-investment theories, and Mr. Harrod has in his anxiety to stress his "Relation" unduly limited its scope on the one hand and exaggerated its potency on the other. Von Hayek, whose contribution to the theory of the trade cycle is undoubtedly most valuable, has taken great pains to point out the distortion of capitalistic production brought about by inflationary savings through the banking system and to explain the more violent fluctuations in the capital-goods industries. The non-monetary over-investment school also assert that the alternation between periods of boom and slump is fundamentally a variation in the production of fixed capital and that over-production occurs regularly in the case of durable capital goods, partly owing to the development of modern methods of production which have rendered the production of fixed capital goods largely independent of organic growth, and partly on account of the long interval between the beginning of the construc-

tion of plant and factory and the point at which they begin to turn out products. The comparative durability of these instruments is another factor affecting the fluctuations in their supply. The principle of acceleration or magnification of derived demand or in the terminology of Mr. Harrod the Relation, undoubtedly supplies an explanation of the greater fluctuations in fixed capital industries. But it cannot be an independent factor explaining the trade cycle; for all that it says is that fluctuations in consumers' demand react back on investment much more strongly. It would therefore be necessary to explain first why or how the initial changes in consumption get started. According to J. M. Clark, moderate fluctuations in the physical volume of retail and even wholesale trade are in striking contrast to the fluctuations in the production of producers' goods, which often amount to more than 30 per cent. This difference can be explained by the Relation, because in order to increase the rate of output of finished goods, it is necessary to make heavy investments in the shape of stocks or fixed capital, the fruits of which mature only in the distant future. The degree of magnification of this kind of derived demand depends on the durability of the machines. Again "whenever the volume of durable producers' goods increases in response to an increasing demand from consumers, it requires a larger percentage increase in the immediate flow of production of new producers' goods to bring about a smaller percentage increase in the total volume of such goods in the hands of those who use them." It has also to be remembered that the magnification of derived demand depends on changes in the rate of growth of consumption and not on the absolute change of the final demand. Even when the increase in demand for the finished product is not a net increase in aggregate demand but only the result of a diversion of demand, the Relation may operate and bring about a net increase in the demand for producers' goods. All this is common knowledge and has been developed by a host of well-known writers.

Mr. Harrod, however, seems to overrate the importance of the Relation. There are well-known limitations to this principle. The existence of unused capacity and the possibility of a more intensive use of factors of production and especially of labour may put off its operation. Further the distinction between replacement demand and expansion demand is vital in this respect. The increase in replacement demand, depending as it does, on the size of the capital stock and its age composition may more than offset the diminution in expansion demand. Further, as has been pointed out by Hansen, the Relation is much

more complex and uncertain. Growth of capital production does not depend merely upon changes in consumption, and even if consumption increased only at a steady and uniform rate, vast changes in the production of capital goods may occur on account of inventions, the discovery of new resources, changes in efficiency of factors of production, and these are at least as important as changes in consumption. The significant factor crying for explanation is the more violent fluctuations in the expansion demand for capital goods and these are caused in the modern highly dynamic and progressive economy by various factors, not necessarily due to fluctuations in current consumption.

But what factors cause changes in consumption? It is in his explanation of the changes in consumption and of the mutual interaction of investment, income and saving that Harrod makes his most distinctive contribution. His whole conception is dynamic. According to him, consumption diminishes or slows down partly because as income grows the propensity to save increases and partly because the boom brings a shift to profit which leads to larger savings. The effect of these two dynamic determinants—determinants in the sense that they determine the rate of growth of output—is to act as restrictive influences on expansion. On the other hand, the effect of the third dynamic determinant, *i.e.*, the amount of capital used in production, is expansive. But as the advance continues, the shift to profit is intensified and the restrictive force of the first two determinants comes to exceed the expansive force of the third, bringing about a break in the boom.

It is necessary to examine in detail this central part of Harrod's thesis; for here he departs, not so much perhaps in fundamentals as in his interpretations, from the theories widely held by other writers. First with regard to savings. There is reason to believe that people tend to save a larger proportion of a higher income, although for lack of statistical data it is impossible to measure how savings behave during different phases of the cycle. But in the early phases of expansion at all events the proportion of income saved certainly increases. While that part of the supply of savings coming from current income is not perhaps very sensitive to changes in the interest rates, in respect of the other part which directly arises from increase in income through increase in investment, the supply is very elastic. As the size and rate of growth of income increase, the proportion of income saved also increases. So far there can be complete agreement. But Harrod, following Keynes, refuses to accept the existence of inflationary savings brought about by the banking

system. According to him, savings can never exceed investment and the two are always brought into equality through constant changes in net investments, income and savings. Thus in terms of the Multiplier, " the amount of saving undertaken is accommodated to the amount of net investment through changes in the level of income." It is common ground that idle savings accumulated during depression feed investment activity in the boom but they soon get exhausted and are insufficient for the heavy investments of the boom period. During this expansive period the volume of investment is much larger than the volume of savings. But while most writers hold that the difference is made up by inflationary savings brought about by the banking system, Harrod believes that the short-period disequilibria between intended investment and available savings will themselves lead to action to rectify matters. The rise in the level of activity and of income which this effort will cause will bring about the amount of savings required to finance the investment. That the means of financing the boom can only be derived from the boom itself may be accepted, as has been pointed out by Ropke. But the question is whether the banking system performs only an essentially technical service or whether it has the power to create " savings " required for the purpose. Rightly understood the difference seems to be more a matter of terminology rather than of substance. But great credit is due to Harrod for focussing attention to the manner in which investment supplies the means of financing itself through its effect on output and income. The whole controversy relating to the banks' power of creating credit and varying the quantity of investment has been placed in a new setting. Harrod's view that the amount that the banks lend to industry is precisely equal to the amount that the public lends to banks on deposit and that they are mere conduit-pipes seems unexceptionable. Only recognition of this valuable proposition does not preclude the use of a convenient term to express a short-period gap between investment and savings. Mr. Harrod himself is somewhat shaky in his attempts to regard the two magnitudes, savings and investment, as one and admits that " in a short period the amount of investment which those responsible *intend* to make may not be equal to the amount which people choose to save."

In examining the causes that lead a shift to Profit, Mr. Harrod first draws attention to the possibility of increasing output in the early revival without a change in the size of the minimum cadre and therefore without increasing the cost of what he calls " overhead primes." This may increase profit. Again the operation of the Law of Diminishing Returns, while it un-

doubtedly causes rise in prices, may also bring about a shift towards profit. Above all, Mr. Harrod brings in a new principle to reinforce his argument. For if the Law of Diminishing Returns cannot account for the whole excess of the movements of price over the movements of rewards to factors of production, some other factor must come in to explain the gap. The diminishing elasticity of demand accounts for quite substantial changes in profits and prices. Harrod rightly holds the view that imperfect competition increases as the community becomes richer. Demand becomes more and more inelastic with increase of income, and hence producers will be able to profit in an expansion phase even when individuals restrict their output. Thus while it serves to explain the tendency of profits to increase in the boom, it becomes a force tending to pull activity back to its equilibrium level through its effects on saving and investment.

When either a larger proportion of income is saved or a shift to profit occurs, consumption diminishes and through the principle of Relation, investment recedes. But since a recession in investment diminishes total activity and income, it follows from the principle of the Multiplier that consumption is again affected. To put the matter in Harrod's own words: "As soon as disappointment in the results of past investment occurs in consequence of the working of the three dynamic determinants, the rate of increase of investment slows down. This, in accordance with the Multiplier entails a further slowing down in the rate of increase of consumption. This in accordance with the Relation entails an absolute fall in net investment. This in accordance with the Multiplier entails an absolute fall in income and consumption. This in accordance with the Relation entails that net investment is rapidly reduced to a very low level, if not to zero." Thus the logical operation of the chain of processes is complete.

Is there anything to prevent the breakdown of the system as envisaged above? Not unless the third determinant, *i.e.*, the amount of capital per unit is in full operation offsetting the other two determinants. If the new capital goods are more highly capitalistic or if population is increasing, the advance may be sustained. There is another possibility. If the rate of interest falls, production may become more capitalistic and a steady rate of advance might be maintained. But in Harrod's view the above conditions are highly improbable.

The question arises as to whether a larger ratio of savings to income necessarily implies a diminution in the rate of increase of consumption. Some doubt also is expressed if actually the rate of consumption fails to increase proportionately with income in

periods of prosperity, if one interprets the term broadly to include the consumption of durable consumption goods. But even if these doubts are legitimate, there are other reasons why a reduction in consumption is almost inevitable. In the first place when all factors have been re-employed after the slump, the rate of advance must slow down, as factors have to be drawn from the capital-goods industries. The increase of consumption must slow down once a considerable proportion of the unemployed is taken back into work. Secondly, there is no doubt that Harrod is right in assuming with Keynes that savings have a deflationary effect. As Haberler has pointed out, "if ever a part of the savings are hoarded, they will not give rise to an increase in demand for producers' goods equal to the reduction in demand for consumers' goods which they occasion." The further effects of savings arising from further investment are even more deflationary. Hence on the main question, Harrod is undoubtedly right that the saving which accompanies an expansion phase tends to slow down the expansion. The higher the proportion of income saved, the lower the income level at which expansion will cease. But his diagnosis seems to be too narrow and partial. It allows only for one type of maladjustment, but as will be pointed out below, there are other types of maladjustments which may be brought about by the boom.

For example, a decrease in demand or an increase in cost in particular industries may lead to a diminished demand for capital. Even if the decreased investment in some industries may become available to other industries, there may be friction owing to temporary hold-up in the flow of money, leading to recession in activity. Any lack of elasticity in the means of production may again bring about a deflationary shock leading to contraction. Mr. Harrod gives insufficient attention to those disturbances created by the expansion itself and more particularly to those in particular industries which may be compelled to curtail output. In the words of Haberler, " while there may be no initial decrease in the money stream the flow of goods does not always correspond to the flow of money and its divisions. Hence in some lines of production, demand does not cover cost." Again monopolistic restrictions on supply of factors, a rise in wages caused by the pressure of trade unions or a decrease in efficiency of the workers on account of the use of inferior machinery and equipment are all factors which may start a process of contraction. But when every deduction is made, Harrod's thesis stands out as a remarkable contribution to the analysis of dynamic equilibrium.

POONA BANKER AND BOMBAY BRANCH-MANAGER

(Business Correspondence of a hundred years ago)

BY

PROF. V. G. KALE, M.A.,

Poona.

It is satisfactory to reflect that it is now possible to obtain first-hand information from authentic contemporary documents regarding the nature, the scope and the methods of indigenous banking as it was practised in India in the eighteenth century. Papers relating to an earlier period are extremely rare and will have to be diligently searched. Account-books and banking correspondence even of later years are not indeed plentiful and will have to be unearthed and collected, so that we may be able to obtain from them a full and reliable picture of the economic and social conditions of our people in the last century. The Bhārat Itihāsa Mandal (Indian Historical Society) of Poona has a large collection of papers of certain banking houses of the eighteenth century and I am indebted to this material for a good deal of the information about indigenous bankers which I have been trying to give to the public. I have referred specially to this matter here with a definite purpose. Knowing as I do, the interest which the Government of His Exalted Highness has been taking in the preservation of old monuments and in historical investigation, I should like to indicate a line of valuable economic research which may be usefully taken up. The accounts of the Poona banker which I have been scrutinising, clearly show that he had extensive business connections with the territories of the Nizam's State two hundred years ago. Aurangabad, Burhanpur, Bhaganagar and other towns were large centres of industry and trade, and remittances of money to the extent of lakhs of rupees were annually made between these places and Poona by means of *hundies.* I have before me statements of account sent by an Aurangabad banker two centuries ago to his Poona *confrère.* In the account-books of the Poona banker which I

have before me, several entries are found relating to *hundies* drawn from Narayanpet for the supply of a famous style of women's *saries* which were, for generations, very popular in the Deccan. On enquiry I learn that Narayanpet is a petty town in Hyderabad State, near Raichur, and that it is known for its hand-loom-weaving industry, though it is in a decadent condition to-day. It would be worth while making enquiries in this place. I feel assured that there is considerable scope for economic research along these lines in these Dominions which possess immense wealth of historical material. Search made in this direction, before it is too late, is calculated to be rewarded with important finds in the shape of account-books and correspondence which will render invaluable assistance to the student of economic conditions prevailing in the Deccan in the past centuries. I shall not deal with this subject further here since it is not strictly germane to my paper. I cannot, however, refrain from making an appeal to the authorities and to scholars in the State to consider seriously the suggestion I have ventured to make above.

Bankers' account-books are, of course, the basic material for a study of the system of Indian indigenous banking. Entries in these books are usually sufficiently informative giving detailed particulars of various transactions. But the correspondence of bankers with their clients, agents and managers is obviously more instructive. It throws a flood of light upon the character of the whole business and facilitates a correct interpretation and a clear knowledge of the old banking system. Unfortunately, such documents are difficult to get at. The papers have, in most cases, been eaten up by white ants or otherwise destroyed. Among the papers of the Poona banking house (Dikshit-Patwardhan), I have come across a number of letters written by and to the banker in connection with various banking transactions. There are hundreds of letters covering a period of a hundred and fifty years, beginning with the second decade of the 18th century. The Poona banking house was a banker to government, sardars, jamindars, high officials, businessmen and others; and these persons have written to their banker asking for accommodation, acknowledging debts, ordering payment of various sums to people named, explaining the issue and receipt of *hundies*, complaining about delays and offering excuses for non-payment and so on. The whole correspondence is thus very illuminating. I do not, however, propose to deal here with this correspondence, as a whole. I have selected for this paper a batch of letters written by the manager of the Bombay branch (dukān) of the Poona banking house to his head office from day to day, reporting events

and asking for instructions. The letters selected pertain to the third decade of the last century. Curiously enough, most of the letters are written on very small slips of paper and an attempt is made in them to compress a maximum of matter in a minimum of space.

A hundred years ago, the Island of Bombay was not connected with the mainland by any bridges and the sea separating the two had to be crossed in boats. As the capital of the government of the East India Company in the Presidency, the Island was slowly growing in importance. It was also a prominent Indian port for foreign trade and provided facilities for business with other parts of India. There were bankers in Poona who could, no doubt, supply drafts on distant places like Benares and could cash *hundies* from the far-off south. There are numerous instances of *hundies* of this type recorded in the accounts of Poona bankers generations before the rise of Bombay to importance. But it appears that the Poona banker thought it desirable to open a branch in Bombay with a view to take advantage of the growing business facilities it afforded. Though indigenous bankers accepted deposits from clients and allowed money to be withdrawn by means of orders to pay stated sums to third parties, they relied mostly on their own funds which used to be plentiful. The letters under reference show clearly that the Poona banker regarded Bombay as a convenient field for the investment of surplus funds which were lent to clients against the pledge of jewellery and sometimes the mortgage of house and other property. At the time to which this correspondence relates, the palmy days of Maratha rule had gone and opportunities for investment had become restricted. It was necessary to exploit Bombay to fill up the void.

But it is more important to notice the fact that the Bombay branch was beneficially used to finance traders who had to make purchases and sales in the Island. The branch was extremely helpful to up-country bankers who had remittances to make on behalf of their clients and wanted drafts on distant centres. The banker-clients of the branch in Bombay were called *Adatyâs*, and annual statements of their account with it are available. The branch gave the bankers credit and cashed their *hundies* in Bombay. It kept its credit balances with them at reasonable levels and expected the bankers to send locally purchased drafts from time to time to enable the branch to keep the credits granted within proper limits. The prevailing rate of exchange was an important factor in the regulation of this business. It appears that the Bombay-Poona exchange showed enormous fluctuations

from day to day and even from hour to hour, and the *Adatyâs* and the manager of the branch were equally keen upon taking advantage of a favourable turn in the rates. The manager of the Bombay branch sent to the *Adatyâs* bulletins from time to time communicating to them the rates of exchange on various centres in India and soliciting business from them. Copies of these letters were sent to the head office in Poona or rather, the letters were sent to the *Adatyâs* through the head office. The manager of the branch writes frequently, almost daily, to his employer in Poona, explaining to him the financial position as it develops at his end and asks for instructions. He likewise sends to the head office statements of accounts to keep it in touch with his affairs and the head office is very particular about regularly receiving these reports and various statements of accounts.

Here is a report sent by the manager of the Bombay branch to an *Adatyâ* in Poona:—"Benediction to . . . in most auspicious city of Poona from . . . in Bombay. Your letter was received. Exchange rates on various places in the country are as follows:—Poona: Rs. 103—10; Surat: 100—4; Bhaganagar: 87—6; Chinapatan: 101—10; Calcutta: 107; Nagpur: 91—8; Ujjain: 103—2; Indore: 100—8; Pali: 102—12; Ahmedabad: 92—6; Kashi (Benares): 103—6; Jaipur: 104; Rial: 213—8; Chandwad (fine) Rs. 102—4; Chandwad (old): 103—6; Belapuri: Rs. 112; Putali: 5—4; Malharshahi: 106; Jaripatka: 102—8; Gold: 16—8. These are to-day's rates. God knows to-morrow's. Shake 1756, Kartik Vadya II."

Another sample may be quoted:—"To . . . at Poona. Greetings. From . . . at Bombay. You made *hundies* amounting to Rs. 500/- payable and drawn on us. The money was duly paid. Since then, we have had no letter from you. Now about local news. There has been no rain these two days. Prices in the markets are going down. *Hundi* rates on various centres in the country to-day are as follows:—

Rs.	102—2:	Poona	Rs.	106—10:	Calcutta
„	91—2:	Baroda	„	102—10:	Ujjain
„	102—8:	Chinapatan	„	97—0:	Ahmedabad
„	85—3:	Bhaganagar	„	81—6:	Nagpur
„	106—12:	Jaipur	„	102—12:	Benares

These are to-day's rates. God knows to-morrow's. Bhâdrapad Vadya 13, Shake 1755."

The above two samples will give a sufficiently clear idea of the money market reports sent out by the manager of the Bombay

branch to up-country constituents. It will be seen what a wide range of commercial centres is covered by the rates quoted. Prices of gold and silver are given and the rates for exchanging different varieties of rupee coins are also quoted. The trend of general prices is likewise indicated and business is solicited. In several letters written to the *Adatyâs*, the position of relative credits and debits between them and the branch is discussed. The branch-manager frequently complains in his letters both to his head office and to the *Adatyâs* about the overdrawn position of the latter and he appeals to his clients not to allow their drawings and debits to exceed reasonable limits. *Hundies* are drawn on him according to requirements of the drawers and the manager often finds himself short of funds when payment becomes due. He has then to borrow temporarily from local bankers but this accommodation is often uncertain and costly. The manager writes to one of his *Adatyâs* in the following strain:—"Your debit balance at the end of the last month was Rs. 974-5-6. The *hundi* for Rs. 2,000 drawn by you was paid off to-day. While drawing on us you should send us *hundies* for realisation and crediting to your account so that your debits and credits may generally balance each other. We have recently drawn *hundies* on you and we trust you have paid them off. On Saturday last we have drawn a *hundi* of Rs. 500 in favour of Vrijmal Dullabh. The rate of exchange was Rs. 5. Pay off the amount on the due date. You have drawn *hundies* of Rs. 1,500. They have been presented. You drew *hundies* for Rs. 1,500 but took no care to replenish your credit with us by sending us *lahane hundies* for Rs. 2,000 to enable us to meet your corresponding draft. Be it so. Send us a draft before the date your *hundies* become due. Try to equalise your debit and credit balances from time to time. If not, let us know whether we should draw on you. We learn that money is tight on your side. There should be no occasion for our employer to complain. Your drawings and payments into your account should go parallel. We are always at your service and let us have your business. The following are today's rates of exchange . . . Jyeshta Shudha, Sunday, Shake 1757."

The up-country banker who was in account with the Bombay *Pedhi*, sold to a local dealer, who had to make a payment in Bombay, a draft drawn on the branch, and he was expected to see to it that he had sufficient credit at the *Pedhi* so that his overdraft should not be excessive. For this, he was expected to purchase from a local dealer who had to receive payment from a merchant in Bomabay, a *hundi* drawn on the latter and to send

it on to his Bombay banker for credit to his own account. The *hundi* thus locally purchased and sent to Bombay to be credited to his account, was known as *lahane*. The manager insists, in his letters, on receiving such *hundies* from time to time so that he may have sufficient funds at the *Adatyâ's* credit out of which to pay the latter's drafts. The up-country bankers were slow or remiss in this and the manager of the Bombay branch was annoyed and frequently embarrassed owing to lack of funds to pay drafts drawn on him when they became due. It may be asked why did not the Bombay *Pedhi* draw upon the up-country bankers when the latter's credit with it had run low or had been exhausted? The answer to the question is that the *Adatyâs* did not like to be drawn on unless the rate of exchange was sufficiently favourable to them, while the Bombay *Pedhi* could not afford to wait for a favourable turn in the rate of exchange since it was itself compelled to borrow or to pay interest on *hundies* not paid off and kept standing (*Khadi*). It would, likewise, be awkward if a *hundi* drawn and sold in Bombay, was not accepted and paid by the *Adatyâs* owing to lack of funds and monetary stringency on their side.

A few words are necessary to explain this exchange business and the difficulties which it created. By the time to which this correspondence relates, *viz.*, A.D. 1833, the East India Company's rupee had become an established medium of exchange. But an embarrassingly large variety of old rupee coins in different states of defacement and deterioration was still current in up-country markets, though the *Surati* rupee predominated in Bombay. The rates of exchange quoted above, are expressed in terms of the number of *Surati* rupees for one hundred local coins at the places named. In the first of the above two bulletins, four different rates for four kinds of rupees have been mentioned, viz., *Chandwadi*, *Belapuri*, *Jaripatka* and *Malharshahi*. The different rates are obviously based on the quantities and relative intrinsic values of the rupee coins. The difference was known as *batta*. The exchange between Bombay and Poona was between the *Surati* rupee of the Island and the *Sicca* of Poona and the rates varied from par to Rs. 7-8 in favour of the *Sicca*. This large variation was due to the relative scarcity or plentifulness of money in the two markets. This explanation is explicitly given in some of the letters of the Bombay manager to his principal in Poona. In one letter it is stated that money is stringent in the Bombay market because a Chinese ship has arrived in the port and certain kinds of goods are being unloaded. In another letter it is stated that the market is tight because opium

auctions are on and there is a very keen demand for money. In a stringent money market in Bombay, the manager of the branch would have to sell a draft upon his up-country *Adatyâ* at a low rate. For a draft for a hundred *Sicca* rupees in Poona he would ordinarily get, say, one hundred and one *Surati* rupees in Bombay, and the *Adatyâ's* account would be credited with that amount. With a plentiful supply of money, the price of the draft on Poona may rise to 105 rupees and the *Adatyâ* would get credit for this larger amount. The up-country bankers naturally preferred to be drawn upon when the rate of exchange was favourable to them, as in the second instance here.

There is an extremely illuminating letter addressed by the manager of the Bombay *Pedhi* to his employer in Poona. The latter appears to have bitterly complained against the former's practice of drawing upon the *Adatyâs* and thus accumulating their credit balances with the branch. The manager has replied to his master's admonition in incisive terms and explained the difficult position in which he finds himself. The letter is terse but quite explicit. The substance of his argument may be presented thus. The manager writes: "You say in your letter that I am indifferent as to the advantage or disadvantage concerned in my drawing *hundies* upon the *Adatyâs*. You instruct me to sell drafts on the *Adatyâs* only if there is an excess of their credit with us. You further say that I should not pay interest to anyone owing to due dates of *hundies* being passed. But it must be pointed out that *hundies* drawn by the *Adatyâs* are often sight drafts or are four days' time bills. On the other hand, *hundies* sent by the *Adatyâs* for collection and credit to their accounts (*lahane*) are encashable after four days or a longer period. While, therefore, payment becomes due, realisation is delayed. I have then to seek accommodation from Vrijmal Dullabh, Nathubhai and others. Sometimes they give me the required credit but sometimes they do not. They put me off from day to day. If credit is secured beforehand, in anticipation, interest will have to be paid. I have to keep with me a cash balance of about Rs. 500 to be able to meet drafts payable at sight. To add to the difficulty, there is the *hundi badla*. You have said that *lahane hundies* would have been received from the *Adatyâs* if I had drawn on them at the exchange rate of $3\frac{1}{4}$ to $3\frac{1}{2}$ per cent. But the *Adatyâs* had no excessive credit with me and if I had drawn on them, I would have had an excessive cash balance with me. If I am to wait for a rise in the rate of exchange before drawing on the *Adatyâs*, how am I to pay

off such drafts as will be drawn on me, in the meanwhile? I shall certainly act up to your instructions. You have asked me to keep the accounts of the branch properly. To this I may say that I have kept a separate book for recording transactions in relation to *hundies*. There is a separate day-book and a book for monthly *pakka* accounts. There is also a separate ledger. You will see from the *Shilakband*, when you receive it from me. I have written letters to *Adatyâs*. They may please be considered and instructions may be sent to me."

This is an interesting disquisition on correct banking methods to be followed in certain given circumstances, and it would be superfluous for me to offer any comment of my own. There are several other letters in which this aspect of banking business is discussed. The matters dealt with in the letters are too varied to be mentioned here. The manager of the branch seeks the advice of the head office in every case. If he is in want of funds, he enquires whether he should draw on the head office and if he has a surplus, he wants to know if a part of it may be transferred to Poona by means of *hundies* if the same cannot be locally invested in loans.

The complaint regarding the persistent habit of the *Adatyâs* drawing upon the Bombay *Pedhi* and obstinately omitting to replenish their credit with it by means of *lahane hundies,* is repeated in a number of letters, in one of which the manager demonstrates how he is placed in a fix, by giving details of the account of each one of the *Adatyâs*. The manager tries to make out that, in the circumstances, it is impracticable to follow the instructions given by the head office. The abounding supply of currency in Bombay, leading to the depreciation of the *Surati* rupee (Rs. 107-8 to a hundred Poona *Sicca*) is mentioned in certain letters while stringency in the money market in Poona and high rates of exchange on Bombay are also referred to. Dealers took diamonds for sale to Bombay and they made use of the services of the branch there. To ensure the safety of valuables, the system of insuring them was adopted and certain bankers specialised in this business. In a letter of the manager in Bombay it is stated that an insured parcel was duly received. The parcel had a seal in ink of a man's face which was found on the seam in two places. The face on the seal was not very clear though the secret or code sign was quite visible. In an account-book for Shake 1756 (A.D. 1834) there is an entry of Rs. 6-3 debited to a *Javeri* for arranging for the insurance of his jewellery valued at Rs. 1,232-3 at the rate of As. 8 per cent. The insurer through whom the business was actually executed, was

paid on Rs. 803 at the rate of As. 6 per cent and the difference was credited to profit by the banker.

It appears there was little direct supervision of the Poona head office over the working of the Bombay branch. Clerks were indeed sent out at times for the inspection of the branch, but the head of the bank does not seem to have himself visited the branch as he should have done. He is not satisfied with the management of the branch. There is a report made by a gentleman specially deputed to have a look at the affairs of the branch. He did his work, so to say, on the sly. His report makes it clear that things at the branch are not what they should have been and he recommends a surprise visit on the part of a responsible representative of the head office. There are many other interesting details in the correspondence but I do not propose to deal with them here, as this paper is restricted to banking transactions of a special nature carried out by the Bombay branch. It is possible to give particulars of the advances made and the loans given, the pledges taken and the conditions in which the business was carried on. But they have no special significance. There are annual accounts profit and loss statements and balance-sheets of the branch, from which we get information about the staff maintained, the salaries paid and other expenses incurred. The correspondence also gives a clear idea of the class of persons with whom the branch had dealings as well as the nature of the business they carried on. There is no doubt that the branch was profitable to the banker and helpful to its constituents, large and small.

SOME INDIGENOUS BANKERS IN SOUTH CALCUTTA[1]

BY

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There are, at present, six indigenous bankers at Bhawanipur in South Calcutta. Two of them are doing successful business for over several decades. None of them carry on the business of banking alone. All combine banking with some form of trade.

One of them, Lukhy Babu's shop started business sometime in 1865. The capital was the owner's own property and there was no partner. Sale and purchase of gold and silver bars as also the manufacture of gold and silver ornaments and wares were practically the main business at the beginning. He, in the course of his business, earned the reputation of an honest trader and his customers, mostly non-Bengali upcountry people had great confidence in him. These poor people used to keep their savings with him for safe-custody and never expected any interest for their deposits. The circumstances were almost similar to those in England, where, as a result of the Civil War, "the strong rooms of the goldsmiths offered an alternative to the Tower of London and considerable sums were deposited with them for safe keeping, both by merchants and by landowners." Lukhy Babu used to pay them small interest at the rate of four annas per hundred rupees per month and this attracted further deposits. There was nothing of a pass-book and all deposits were to be made before Lukhy Babu who would keep all deposits and enter these amounts in his Account Book. There was no variety of deposits and the depositors could withdraw any amount any time provided they came personally and asked for it. Exceptions were made only when Lukhy Babu was satisfied that the depositor could not come due to unavoidable reasons. In those cases he used to make arrangements for payments by sending one of his trusted men to the depositor's place.

As to lending, the usual custom was that the borrowers would bring gold and silver bars or gold and silver ornaments and

1 I am indebted to Mr. A. N. Sen, a grandson of late Lukhy Babu and Mr. Parbati Sanker Mitra, the managing partner of Mitra Mukherjee & Co., of Bhowanipur, Calcutta, for the facts and figures of this paper.

wares as security for borrowings. These things were assessed by the proprietor himself and advances made up to a maximum of 70 to 75 per cent of the appraised value. In these cases no bond was taken nor any registration made. Lukhy Babu never discriminated between productive and non-productive purposes. Grants of loans were always available so long as the security was considered sufficient. In no case, any advance was made against personal security or on the guarantee of a third party. But in sixty-five cases out of hundred, the loans were used for purposes of either starting some small business like that of purchase and sale of vegetables in the neighbouring market or of extending the scale of an existing shop.

The capital with which Lukhy Babu started was his own and it was in the neighbourhood of fifteen thousand rupees. This along with the deposits was invested in gold and silver, either bars or ornaments, and that too in his shop. During the first decade of this century, the working capital rose to about 15 lacs, and the business became pretty large. And he found that considerable amount must be kept in liquid cash. By 1908, when this amount rose to 20 lacs, he kept 4 lacs in silver and currency notes which used to be with the proprietor at his residence, and the rest invested in his shop and in lending to borrowers mostly against jewelleries. From about this time, he realised that it was a losing proposition to keep so large an amount in actual cash and he began keeping a certain portion in current accounts in different joint-stock banks.

The interest charged was 3 pies per rupee per month in case of gold security and $4\frac{1}{2}$ pies in case of silver security, payable always by monthly rests.

Establishment charges were never very high as the proprietor himself did a lot of work of the bank. Besides, banking being combined with trade a common staff used to do the required work for both the branches of the business. The whole of the business was and used to be carried on in vernacular and the system of keeping accounts was indigenous. By 1908, when the business developed, the establishment charges also developed and they were in the neighbourhood of about Rs. 1000 per month. These charges included the salaries of the cashier, accountant and the salesman.

The low establishment charges did not lead to large profits from the banking business, as proprietor had to give up sometimes a considerable amount of interest charges in order to settle cases which, sometimes, caused him losses. But cases of losses

were rather rare. It should, however, be noted that Lukhy Babu and now his sons and grandsons were and are looked upon by their customers as friends in need and the owners also were and are intimately acquainted with the material conditions and nature of business of their clientele. This is why they never mind if they have sometimes to put up with compromises.

This shop has, of late, been trying to avoid any further deposits although it is still continuing jewellery and lending business. As a matter of fact, after the sons started a public limited Company—The Luxmi Industrial Bank Ltd.—almost everything of deposits has been transferred to it.

The next in seniority is Messrs Mitra Mukherjee & Co., Bankers and Jewellers, who started banking business in 1902, although it was established as a jewellery firm in 1884. The business started with private partners and the initial capital, the exact figure about which is not now known, was obtained out of relations' and friends' accumulations. The banking business was started mainly to give credit facilities to the people of the locality and to small traders of the adjoining bazar. This is why they used to advance small amounts for the day against personal security mostly to known petty goldsmiths who purchased used gold and silver wares and ornaments, refined them and sold them at a little less than the market rate in the evening to these indigenous bankers. Petty shopkeepers of the neighbouring bazar used to obtain similar privileges and they used to pay back the money in the evening after selling potatoes, vegetables, fruits, etc., which they purchased in the morning with these advances. The interest charged for these loans was one anna per day per hundred rupees. Small credit was also available for unknown people of small means if they could offer bell-metal and cheap silver wares or ornaments as security. For this type of advances, the rate of interest was 12 per cent per annum at monthly rests. Over and above these, larger amounts could be obtained against gold and silver, both bars and ornaments, Calcutta real property as also costly and highly artistic shawls and precious stones. These bankers have, of late, discontinued making any advance against precious stones and shawls as also smaller amounts, below Rs. 100, against cheap silver wares. Rate of interest in these cases is charged differently. 12 per cent per annum is charged with monthly rests in case of gold security, 12½ per cent compound at three monthly rests against Calcutta property and 24 per cent with monthly rests against precious stones because of the highly problematical valuation of these stones.

These bankers have been, from the very start, accepting deposits in various forms: fixed, savings bank and current account. The fixed deposits again are for three different periods, six months, a year and two years with provision in each case for renewal. Payments were and are never made through cheques. Withdrawals are always by presentation of pass-books. For the last three years, from 1934, they have discontinued accepting any new or renewing further fixed deposits from outsiders, as they say, they cannot employ these sums with sufficient profit to pay interest mostly at 5 per cent. But they cannot avoid their relations and they are still accepting their money and paying mostly at the same rate. The rates in case of fixed deposits were to be determined mostly by agreements, whereas savings bank and current accounts used to obtain 4 and 2 per cent respectively. These rates have now been reduced to 2½ per cent and 1 per cent respectively with the additional proviso, in case of current account, that no interest will accrue unless the daily balance exceeds Rs. 250. These bankers never charged nor even now charge any incidental charges.

In addition to banking and jewellery business, they accept valuable commodities for safe custody at a rate of 4 annas per hundred rupees worth of things for a year or a part thereof. They also discount cheques of known parties on Sundays and other bank holidays at a rate of ¼ to ½ per cent for the whole period.

The present position of the banking business is that all kinds of deposits amount to a little over 6 lacs of rupees. Of these, they have invested near about 4 lacs in gold, bars and ornaments, Rs. 75,000 in Calcutta real properties and 1¼ lacs in liquid form. Of this liquid form, 10,000 rupees are cash in hand, 40,000 are deposited in current account in Calcutta Banks and 75,000 are in savings bank accounts. All these deposits are not in the name of the firm but in the names of the partners of the business. They do not invest in ordinary joint-stock shares, however safe these may be. Of these deposits, 2 lacs form time liabilities of these bankers and the remaining 4 lacs demand liabilities in the form of savings and current accounts.

The transactions excepting those which involve Calcutta real properties are not usually registered. Advances against mortgage of real estates are always registered. As a normal case 70 per cent of the assessed value is advanced against gold and a little over 50 per cent against landed properties. Loans against personal security are given only in small amounts to

people who are very intimately acquainted with the partners and whose material conditions are known in details. These are mostly petty goldsmiths of the locality and ordinary shopkeepers of the adjoining bazar.

The establishment and the controlling authority being the same in both the branches, the work of management is minimised and is done economically. But this economy in expense does not enable the bankers to make large profits. Sometimes they have to put up with compromises and settle accounts causing them some losses. Besides, the partners offer provident fund facilities to their servants, although they themselves work free of any remuneration. They draw certain sums when required and these are deducted at the end of the financial year from the share of the profits, when the accounts are closed for the year. These bankers have further been compelled to reduce the rate of interest chargeable on the loans due to the competition of joint-stock banks, although they do not always enjoy the advantages of incorporation. This has substantially reduced the amount of profits. The profits earned by these bankers averaged in the neighbourhood of Rs. 16,000 which works out a net return of 24·4 per cent approximately. These profits exclude a modest reserve fund of Rs. 34,000 to which is added every year the earnings of this fund at a rate of 5 per cent.

The four others which form a group different from these two, both in dimension and varieties of business, accept, not infrequently, parties' securities, take them to their bankers, obtain money and advance the same to their customers. They also advance against shawls, bell-metal, cheap gold and silver wares and the like. All of these have been working since the time of the last war when the rate for money-advances rose pretty high. The clientele consist mostly of small shopkeepers, petty gold and silversmiths, well-known to these bankers, and a large group of salaried middle class "Bhadralok" of the locality. Their methods of business do not appear to be so methodical as those of Messrs Mitra Mukherjee & Co., and the rate of interest charged is a little higher than the prevailing market rate. Otherwise in general details there is great similarity with the above two.

The successful existence over a long period of this type of banking concerns in big commercial cities like Calcutta confirms the opinion that combination of trading with banking is not unsound and is a special form of banking evolution suitable to the conditions and habits of the people of our country. Banking, even in the crudest form of loan taking rests primarily on the

co-ordination of confidence and credit amongst the contracting parties and the personal relations which grow out of trade have to a great extent been responsible for making the function of banking attractive to the trader and beneficial to the customers. The lending operations undertaken by these bankers help the small traders and petty shopkeepers to extend their business and sometimes to start new ones where they are sure of a good return. A substantial portion of poor residents of towns and cities who do not usually possess good security avail themselves of the opportunities given by these bankers and eke out an existence by independent means, and these bankers, in their turn, mobilise the small savings scattered amongst these classes of people. We are afraid, we cannot fully agree with the Bengal Banking Enquiry Committee that the receiving of deposits once an important function of the indigenous bankers has been steadily dwindling. In Calcutta, the reason is said to be the competition of the great banks, foreign as well as Indian, and of government.[2] The experience of indigenous bankers, at least, of South Calcutta tells altogether a different story. One of them, Lukhy Babu's shop has discontinued taking deposits because it cannot profitably employ them in their own orthodox type of jewellery business, nor is it willing to extend the business and thereby employ the capital in discounting inland bills of exchange. The proposition that the receiving of deposits is dwindling is belied by the fact that the Luxmi Industrial Bank Ltd., which is nothing but the deposit section of the Lukhy Babu's shop and to which almost all deposits of the shop have been transferred is doing business with a working capital of more than 20 lacs of rupees. So also the case of Messrs Mitra Mukherjee & Co. They have already refused fixed deposits, not that they do not get them in sufficient quantity owing to the competition of comparatively big banks started recently in the locality but that they cannot employ them with sufficient profits. The reason why these bankers will never feel any want of deposits is that they have, in course of long period of their existence, earned a reputation for integrity in their dealings with their clients. Everywhere they are looked upon by the customers as their friends. They keep close touch with them and do not insist upon the rigour and formalities of hard and fast rules regarding the terms of business. In certain cases, as is still the case in Lukhy Babu's shop, the customers get their money at their own house in cases of emergency.

2 The Report, p. 116.

Thus the trouble is not so much the competition of bigger commercial banks but the difficulties of accommodation to these indigenous bankers in times of necessity and emergency. These firms assert, in reply to the question as to why they are not extending the scope of business, that the banking they are carrying on is absolutely on personal credit and the proprietors never separate their trade from this branch of business, and whenever there is any need for money to meet either the time or demand liabilities, they utilise their own money and hardly approach any bank for accommodation. They can expand and there is undoubtedly sufficient scope for extension if some big banking concern allow cash credits to these bankers at least on joint promissory notes and also agree to discount or rediscount trade bills of all indigenous bankers. If it is not thought proper to extend these facilities to all of them, those among them may enjoy who register themselves and take out a license for doing their business under an Act enacted for this purpose. This will be beneficial to the society as well. The large number of Bhadralok unemployed youth may find the small capital that they need in starting small shops and thereby earn their livelihood. This will give them an opportunity of beginning at the lowest rung of the business ladder and learning what actual business is. As a matter of fact, a considerable number of these young men are availing themselves of the opportunities afforded by some of these bankers in regard to unsecured advances against personal security for very short period and have actually started shops in Jogu Babu's bazar and Lake and Southern markets.

It is an admitted fact that these bankers have financed and are still financing a considerable proportion of the distributive trade of our economic organisation. In that field, they have proved their efficiency and utility, and let us hope, under proper conditions and with greater facilities, they will render a real service to our country where pure commercial banking is still in infancy. The Reserve Bank of India will have to submit, in near future, its report under Sec. 55(1) and let us urge that legislation for the extension of the provisions of the Act relating to scheduled banks to these indigenous bankers be one of the most important proposals in the said report. It must, however, be pointed out in this connexion that details regarding the standard which these bankers must satisfy before they can be given any concessions, and the return to be submitted by these, in case of inclusion, under Sec. 42(2) are to be determined very carefully, lest the purposes of their inclusion are frustrated.

THE PROBLEM OF INDIGENOUS BANKERS IN INDIA

BY

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The problem of the indigenous banker is the problem of constituting him a vital part of the entire banking system of the country, so that his future may be shaped by the destiny of Indian Banking and so that he himself may have an important part in shaping the destiny of the parent body. Fissiparous tendencies must be checked, the disintegrating parts once more brought together, and a new life breathed into the whole.

How the Problem has been sought to be tackled in the Past.

I shall not tire you with a long list of the real or imaginary defects of indigenous banking in this country, for they are well known. I would rather like to examine the broad questions of principle on which past action has been based and try to consider if they are an adequate guide for the present and the future.

It seems to me that when Sir Henry Strakosch formulated his three-fold advice at the beginning of this century, he pointed a way which has ever since been followed by the administrators of this country and the banking world in general. He advised first, to establish a Reserve Bank of India; second, to strengthen the ties between the Reserve Bank and the Joint-Stock Banks in the country; and third, to strengthen the ties between the joint-stock banks and the indigenous bankers.

Attempt at Reform by Legislation.

In pursuance of this policy, attempts have been made to reform the money-lender and the indigenous banker in various ways, so that they might be accepted as respectable members of the brotherhood of Indian Bankers. Some of the classical examples of attempts at reform by legislation are the *Deccan Agriculturists' Relief Act* of 1879, the *Punjab Land Alienation Act* of 1900, the *Usurious Loans Act* of 1918 and the recent *Punjab Regulation of Accounts Act* of 1931. These Acts, which seek to protect the debtor agriculturist against the unscrupulous money-lender, have so far failed in their purpose. Nor should

this surprise us, seeing that legislation has failed to achieve its purpose in every country where it has been tried as a remedy for usury. In the U.S.A. and Turkey, in France and in Germany, the usurer has got the better of the law and has successfully evaded its provisions.[1] In India the difficulties are more numerous; the scripts in which accounts are written may, sometimes, only be deciphered by experts, illiteracy is widespread and the number of amateur money-lenders is legion. The opportunities for the evasion of laws meant for the protection of the debtor are, therefore, many; and the net result is, that more stringent the legislation the worse do the debtors fare. Other legislative methods are aimed at rewarding the better class of indigenous bankers. Such, for example, are the proposals for either the compulsory registration of all, or the optional registration of some of the indigenous bankers, the idea being that such registered money-lenders would be accorded preferential treatment by the joint-stock banks and the Reserve Bank of India in the shape of greater rediscount facilities and cheaper internal remittance of funds. Legislation in this country has thus been based on a two-fold policy of punishing the bad boy and rewarding the good boy, in the hope that the bad boy will thus be encouraged to emulate the good boy and the latter prevented from falling into the evil ways of the former. A patronising attitude is everywhere regarded as an infliction; more so in this case, where we have so little to offer as reward and are so powerless to carry out the threats in practice. For, after all, the value of special rediscount facilities is very small to the indigenous banker, whose main business is on a cash credit basis and who has very few bills to rediscount. Again, in return for the doubtful privilege, he would have to submit to vexatious inspection of accounts and the restriction of the scope of his business. I do not mean that such restrictions are by themselves vexatious or unjustified, but I do maintain that such legal restrictions would continue to fail to achieve their purpose so long as there is not, in the first instance, a strong desire on the part of the indigenous bankers themselves to abjure their age-long isolation and merge themselves in the greater whole of the Indian Banking World.

Other Methods.

We may well ask ourselves as to what we have done to effect this desirable consummation. Besides the legislative measures

[1] M. L. Darling, *The Punjab Peasant in Prosperity and Debt*, pp. 211 ff.

just mentioned, the economists and experts of this country have dangled before the indigenous bankers' eyes the beneficial results which would follow if only they would pool their resources and amalgamate either as joint-stock banks or as co-operative credit institutions or, again, serve as local agents of financing joint-stock institutions in towns, on the 'kommandit' principle. Now, if we examine these proposals closely, we shall see that they are only variants of the method of attempting the reform of indigenous banking by legislation. For, clearly the amalgamation of these bankers into joint-stock or co-operative credit institutions will entail certain legislative restrictions such as publication of accounts, their systematic audit or, possibly, the loss of trading business, under the Companies Acts or the Co-operative Societies Acts. Again, under the 'kommandit' system, the financing joint-stock credit institution will certainly not tolerate its agent, the indigenous banker, to engage in business on his private account. The threat of restriction of the liberties of the indigenous banker is more obvious in all such schemes than any substantial advantage that could possibly be gained. It is, therefore, my firm belief that so long as agricultural credit is based upon a system of cash credits, so long will the other evils continue. To attempt to remedy this by legislation or by other devices calculated to restrict the present freedom of the indigenous bankers is putting the cart before the horse. Nevertheless, such attempts at reform are still being made in some of the most advanced countries in the world and will certainly continue to be made even in the future. We must, however, frankly recognise them as mere palliatives and not by any means an effective remedy for the disease.

There are many authorities in the country who regard Co-operation as the only possible cure. No doubt Co-operation has achieved wonders in the Punjab and Bombay, in the way of reduction of agricultural debt, consolidation[2] of holdings, in encouraging thrift, in checking litigation and in generally raising the standard of education, intelligence and business habits in the villages. But here again we have to consider if Co-operation can ever be expected to replace entirely the system of indigenous banking in this country. If not, then surely some other equally efficient method of finance must be discovered to supplement the efforts of the co-operative credit institutions. The progress of Co-operation in this country has been slow; after thirty years of strenuous effort, we now have about 120,000 co-operative societies

2 *Ibid.*, p. 214.

in India. Co-operation has to fight against the widespread illiteracy of the masses, their unbusiness-like habits and improvident ways. Perhaps these are difficulties common to all reforming organisations. But the obstacle which, I think, Co-operation will find insurmountable is the great tradition and experience behind the indigenous bankers. The latter have struck their roots too deep down in the economic life of the country to be entirely replaced by Co-operation.

If that is a correct estimate of the present position and the future outlook of the indigenous credit machinery in this country, we have to reconcile ourselves to the continued existence of the indigenous bankers and limit ourselves to finding out ways and means for connecting them to the main credit channels of this country.

A New Angle of Vision.

I think we shall have to change our entire angle of vision with regard to the indigenous bankers to effect this. There must not be any hierarchy in the Indian banking world as envisaged by Sir Henry Strakosch. We must not think only of reforming the indigenous banker; we should think in terms of the entire Indian credit world and try to reform the Indian banking system as a whole.

That is, I admit, a big task; but it has to be frankly faced some day or other. The vital problem to-day, as it seems to me, is the necessity of creating a bill market for the internal trade of the country. So long as the present system of cash credits prevails, the bazar rate and rates of discount offered by the joint-stock banks are bound to diverge widely and the indigenous bankers are sure to continue living in a world of their own, cut off from the rest of the banking world of this country.

In a paper,[3] written by me immediately after the inauguration of the Reserve Bank of India, I urged the necessity of creating a bill market for financing the internal trade of this country. Not only will the indigenous bankers be thus brought into direct relationship with the other credit organisations in the country, but a definite distinction will be made between the productive and unproductive debts of the agriculturists. They will begin to realise the uneconomic nature of the large expenses on ceremonial purposes and the importance of thrift.

[3] *The Reserve Bank of India and Agricultural Credit.*

Warehouses.

I think that for the creation of such an internal bill market, the widespread establishment of licensed warehouses is essential. The objection of the agriculturists to pooling their produce will not last long if the right method is hit upon from the very beginning and if proper precautions are taken against the exploitation of the agriculturists by dishonest warehousemen and graders. Reliable warehouses should be set up in every province. I agree with the Central Banking Enquiry Committee[4] that, instead of trusting to Co-operation alone to build these up, we should rather have a Licensing Board in each province, charged with the duty of granting licenses to honest and reliable warehouse-keepers: the Licensing Board to consist of a Government official and representatives of the agriculturists and businessmen of the provinces. Along with the warehouses, we must also have well-trained and reliable graders; and it should be the business of the Government to create such a corps of trained experts. This is, so far as I can see, the only solution of the problem of providing short-term and intermediate credit to the agriculturists on sound economic lines and that of integrating the indigenous bankers under a national system of banking.

When this has been done, I suggest that the Agricultural Credit Department of the Reserve Bank of India should be empowered to rediscount agricultural bills on its own initiative on the Australian model, instead of merely serving in an advisory capacity to the Reserve Bank, as it does at present.

Co-operation.

Reviewing my brochure on "The Reserve Bank of India and Agricultural Credit" in the 1937 Year Book of the Horace Plunkett Foundation, the writer says that in view of the success of Co-operation in Australia and New Zealand, India should also tread a similar path and not place too much reliance upon Government aid. Such a thesis can be defended on two grounds: first, that Government aid is demoralising, that the individual is aware in which direction his economic interests lie and is capable of taking adequate steps to safeguard them or even to advance them. Secondly, that the progress of Co-operation in India has been such in the past and has attained such proportions at present, that we can foresee a not-too-distant future when Co-operation

[4] *The Report of the Central Banking Enquiry Committee*, 1931, Vol. I pp. 222 ff.

will have solved all our problems of illiteracy and thriftlessness, credit and indebtedness. I shall not dwell on the futility of the principle of *laissez faire* in the modern world and how even the most advanced countries of the world, including England, have been forced to abandon it in the interests of a fuller life for the citizen. Conditions in India are unique. Widespread illiteracy, poverty of the masses, differences in language and culture and the vastness of the country, emphasise the need of a directing brain, with discerning eyes which will see the problem in its proper perspective and will be a guide, philosopher and friend to the country as a whole. Again, the attempt to forecast the future of Co-operation in India, in the light of developments in Australia or New Zealand, is highly misleading. In no two countries is Co-operation exactly alike. It is the national genius in each country which must solve its own problems in its own unique way. To appreciate that conditions in India are not the same as in Australia or New Zealand, you have only to read Mr. M. L. Darling's book, *The Punjab Peasant in Prosperity and Debt.* Mr. Darling, as you all know, was a brilliant Registrar of Co-operative Societies in the Punjab for a long time and he frankly confesses[5] that, but for active Government propaganda and assistance, Co-operation in the Punjab would have been a failure. If Government aid is withdrawn to-day, the Co-operative movement in this country will be in imminent danger of collapse. Even in Australia, Co-operation has not been as great a success as it might have been. Professor Parker Willis in his paper on the "Banking System in Australia" says, "Co-operation in Australia has not been so successful as in many older countries." Co-operation having failed to meet all the credit requirements of the country, the Australians have tended more and more to ask for and receive assistance from the States. There are State Banks for making advances to agriculturists in South Australia, Queensland, Western Australia and Tasmania. In Victoria and New South Wales, there are special departments of the State Savings Banks for this purpose and the Rural Credits Department of the Commonwealth Bank of Australia may make advances on agricultural paper on its own initiative. Again, it is part of the general land policy of the States to provide credit facilities to settlers.[6] Such is the position, then, in a country where Co-operation is supposed to have been a great success. In India, where the progress of Co-operation is admittedly tardy,

5 M. L. Darling, *The Punjab Peasant in Prosperity and Debt*, pp. 243, 244, 256.

6 Wills and Beckhart, *Foreign Banking Systems*, pp. 63 ff.

we are, therefore, justified in expecting a little more assistance from the State than we are getting at present. I do not mean to say that Co-operation should be ignored. Far from it; let it receive all the attention that it is doing at present and more; but I maintain that, that is not the only direction in which we should seek to develop. I, therefore, think that no time should be lost in attempting to create a bill market for internal agricultural trading in this country by the widespread establishment of licensed warehouses under the provincial governments. So much for the short-term and intermediate credit needs of the agriculturists.

Land Mortgage Banks.

So far as long-term ' credit is concerned, I think the indigenous bankers could be induced to co-operate, without great difficulty, in any scheme for the establishment of Land Mortgage Banks. Here, I think, the question will turn on whether the debentures of such Banks should be given the status of Trustee Securities, the Government guaranteeing both the capital and the interest on debentures. In the U.S.A. farm loan bonds were given this status by integrating the Land Banks in the Federal Reserve System. Under the Farm Loan Act of 1916, the Land Banks were required to hold twenty-five per cent of their capital in quick assets and five per cent in U. S. Government security. In return, they might be made depositaries of public money and be employed as financial agents of the Government. Further, the farm loan bonds issued by them would be lawful investment for all trust funds; and any member bank or Federal reserve bank could buy and sell them, just as they bought and sold State, county, district and municipal bonds.[7] I doubt if the Reserve Bank of India, yet an infant institution, is prepared to take all this risk. Yet, if the required guarantee is not forthcoming, I do not think the indigenous bankers would be prepared to take a hand in the business, nor would the movement be a success. For these reasons, I think it is the provincial government which should take the initiative and make a small beginning on an experimental basis. The indigenous bankers, the landed gentry and local enthusiasts will certainly co-operate whole-heartedly if they get the right lead.

[7] E. W. Kemmerer, *The ABC of the Federal Reserve System*, p. 253.

Conclusion.

The problems in this country are numerous and complicated. Warehouses and land mortgage banks cannot, by themselves, be a panacea for all evils. We have to fight against illiteracy, thriftlessness and its offspring, indebtedness and poverty, the laws of inheritance which are partly responsible for the uneconomic fragmentation of agricultural land and, above all, the ingrained conservatism of the masses. But, if we are to make a sustained effort on all fronts, the weak points will have to be strengthened, and I consider that the suggestions made in this paper are indispensable for such action.

INDIGENOUS BANKING AND ITS PROBLEMS

BY

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There is nothing more misleading in the science of economics than generalisations, respecting large areas. It is particularly true about the problems of indigenous banking. In a vast country like India there is bound to be a good deal of diversity in practice and procedure. It will bring us nearer the truth if we confine our investigation to narrower range. Consequently I have confined myself to the towns of Hyderabad and Secunderabad.

Definition of an Indigenous Banker.

That person must have been a great diplomat who first introduced the term indigenous banking. It is customary with the diplomats that when they do not possess any definite knowledge about certain things, or do not want to say something definite, they use such language which can mean anything or nothing. Unfortunately this is true of the term indigenous banker. Ordinarily the word indigenous is used in contrast to 'alien' or 'foreign.' Were there in the History of India any foreign bankers doing the same work as the indigenous bankers are doing so as to differentiate between the two? I have been at pains to find out if there is any term or word in any of the vernaculars which precisely expresses the same meaning as the term 'indigenous bankers' does. And in spite of my best efforts I have failed to find any. It is mainly in the understanding of this situation that we can remove the mysterious haze which hangs round indigenous banking, and grasp the fundamental problems facing it. I maintain that the term indigenous banking is entirely misleading and is a forced creation having no equivalent in existing practice. We shall be better able to remove this illusion if we examine some of the attempts which have been made to define indigenous bankers. The Provincial Banking Enquiry Committees that were entrusted with the task of differentiating indigenous bankers from moneylenders, of these many frankly admitted their inability to do so and they could not very well separate indigenous bankers from money-

lenders or could draw no definite line of demarkation between them. The following statement shows the position:—

Indigenous Bankers

Province.		Number.[1]
Madras	...	No figure is given; the communities that do banking business are the Nattukkottai Chettis, the Multanis, the Marwaris, the Kalladaikurichi Brahmins and the Komaties (Vaisyas).
Bombay	...	20,000 (estimated, including money-lenders).
Bengal	...	Number not ascertained, but it is stated that there are only a few indigenous bankers. Number is decreasing.
United Provinces	...	250 (estimated number of indigenous bankers who are willing to receive deposits; the number of modern indigenous firms is 7).
The Punjab	...	66 (according to information obtained from income-tax officers; distributed over 11 districts; in 18 districts there is not a single indigenous banker).
Burma	...	Total number of Chettiyar offices in Burma is estimated at 2,650.
Bihar and Orissa	...	100,000 (estimated number of persons conducting the money-lending part of banking business. Besides, there are about 700 shroffs and urban money-lenders paying income-tax and a large number not estimated, who do not pay income-tax).
Central Provinces	...	There is only one indigenous firm which habitually receives deposits as a matter of ordinary business.
Assam	...	No Information.
Central Areas	...	29 in Ajmer-Merwara, 43 in Delhi and 29 Hindu bankers in the North West Frontier Province, besides a larger number of Muslims. These figures are, however not reliable, as they are not based on the definition given in paragraph 207.

[1] The Indian Central Banking Enquiry Committee, Part I, Majority Report, page 94.

It is clear from the above statement that the Committees of Madras, Burma and Behar and Orissa stated that no statistics were available to differentiate the number of indigenous bankers from those of moneylenders. The statistics given by other Committees are of no help to us as their figures are for money-lenders which include indigenous bankers if any or for those big moneylenders and indigenous bankers who pay the income-tax. For the purpose of distinguishing indigenous bankers from moneylenders the Central Banking Enquiry Committee defined the former as follows:—"By indigenous bankers is meant all bankers other than the Imperial Bank of India, the exchange banks, the joint-stock banks and co-operative societies, and the expression includes any individual or private firm receiving deposits and dealing in hundis or lending money." It is strange to note that a competent body as the Central Banking Enquiry Committee should produce such a useless and meaningless definition. According to this definition all those persons who are lending money can be included in the category of indigenous bankers, thus making very little difference in practice between an indigenous banker who receives deposits and deals in hundis or only lends money. One may pertinently ask then what is the difference between a moneylender and an indigenous banker? That the two are not separate watertight institutions is clear from the following remarks of the committee. They say "we are aware that while there are moneylenders who receive deposits, there are certain classes of banking Communities who, though they do not, as a class, receive deposits, have been regarded by the public for all practical purposes as Bankers." The question arises why the public treats all such persons as bankers? The answer to this question is that for the public there is no difference between a banker and a moneylender. They are all called Sahukars, Mahajans or Sarafs. It is only recently that the big Sahukars or Mahajans who live in towns have begun to style themselves as bankers. The Punjab Banking Enquiry Committee tries to differentiate between the urban moneylenders and the indigenous bankers as follows: "The indigenous banker, may also combine banking and business, but in his case banking is primary. This is largely a difference of degree, and the other differences between the two (the indigenous banker and the urban moneylender) are of much the same nature. The indigenous banker finances trade and industry rather than consumption; the urban moneylender consumption rather than trade. Both banker and moneylender advance partly with, and partly without security, but the banker more often with than without, and the

moneylender probably more often without than with. The banker is generally particular about the objects for which money is required: the moneylender is less careful. A further difference, and one, no doubt, arising from the last two, is that most of the banker's clients repay punctually, and most of the moneylender's have to be pressed. The banker, therefore, can afford to lend at 6 to 9 per cent and rarely goes beyond 12 per cent, but the moneylender commonly charges 9 to 12 per cent and goes up to 18 per cent. The difference is a reflection of the greater trouble and risk involved in the urban moneylender's system." The distinction made by the Punjab Banking Enquiry Committee between the urban moneylenders and indigenous bankers is purely fictitious and imaginary. Even the biggest firm of indigenous bankers in the Punjab, in Lahore, finances consumption, and as a matter of fact a very large proportion of its loans is for unproductive purposes. It owes a major part of its fortunes to such type of loans. I shall further illustrate this point presently when I deal about Hyderabad. What then is the difference between a moneylender and an indigenous banker? I think Dr. Jain laid his finger on the right point when he wrote that " in common usage in India, the distinction between a banker and moneylender is generally based on the working capital." I think Dr. Jain's definition of an indigenous banker is nearer the truth than that of the Central Banking Enquiry Committee. By the term indigenous banker he means " any individual or private firm which in addition to making loans, either receives deposits or deals in hundis, or both." According to this definition any Sahukar can be included in the category of a banker who deals in hundis. And the number of such Sahukars is quite considerable. But to my mind unless the Sahukars accept deposits regularly, they cannot be styled as bankers. Because accepting deposit is a fundamental function of a bank. Dealing in hundis or in bills of exchange is also one of the main functions of a bank. So it is said that those who do not receive deposit but deal in hundis should be entitled to be treated as bankers for they are performing at least one of the main functions of a bank. On this analogy it can also be said that providing financial accommodation is also one of the principal functions of a bank and those who are doing the business of moneylending should also be treated as bankers. It is in this respect that Dr. Jain's definition falls short. It includes a part of the truth but not the whole truth. The simplest and most rudimentary definition of a bank is an institution which receives deposits and lends money. This definition debars the Indian Sahukars to be

included in the category of bankers. I have laboured a good deal to show the hollowness of this fictitious phrase "indigenous banker" because it will help us a good deal in considering the problems of Sahukars.

Before discussing their problems I shall give a brief description of the types and work of Sahukars who are doing business in Hyderabad and Secunderabad. It is not possible to give any exact figures showing the number of persons who lend money but below I shall give a statement showing the number of Sahukars in Hyderabad City and suburbs according to their capital:

Whose capital is more than 1 crore of rupees ...	5
,, ,, ,, ,, 50 lakhs of rupees but less than 1 crore ...	5
,, ,, ,, ,, 10 lakhs of rupees but less than 50 lakhs ...	20
,, ,, ,, ,, 1 lakh of rupees but less than 10 lakhs ...	20
,, ,, below one lakh of rupees	not available.

These Sahukars style themselves as bankers. In order to substantiate my earlier statement that there is no substantial difference between a moneylender and a banker in India, and that the difference which the Punjab Banking Enquiry Committee observes that the indigenous bankers finance trade and commerce instead of consumption, is purely fictitious, I shall describe the activities of one of the biggest firms of indigenous bankers of Hyderabad to show that it finances production as well as consumption.

The Firm of Raja Bahadur Motilal Bansilal.

This firm was established in this State in 1831, and at present is owned by an energetic young man Raja Panalal Pitty, who is also the President of the Hyderabad Bankers Association. His forefathers came from Nagore in the Jodhpur State and first settled down in this State in Bide. They began business on a very moderate scale as grain dealers. Gradually they made money and started lending it, thus combining the profession of grain trading with moneylending. It is needless for me to go into detail and describe how they amassed such an enormous amount of wealth. Suffice it to say that at present this is one of the biggest firms of Sahukars in the State. Their wealth is

estimated at about 5 crores of rupees which consists of landed property, shops and houses, Government bonds and shares of various companies, jewellery, and hard cash. They have four branches in the districts for advancing loans to agriculturists, and also own a ginning factory in Hingoli (Hyderabad-Deccan).

The Scope and Method of their Business.

The main business of this firm is to lend money to other Sahukars and to issue hundis. They also receive deposits. But it must be understood that these deposits are not from the public but are from other Sahukars. It is strange to note that deposits are accepted on current account and for short periods only. No fixed deposits are taken, and the rate of interest allowed on such deposits varies from $4\frac{1}{2}$ per cent to 6 per cent per annum according to the season. If it is a busy season and money is in much demand, interest up to 6 per cent per annum and occasionally a slightly higher is allowed, but during slack season this rate is reduced to $4\frac{1}{2}$ per cent. On enquiring why deposits were not accepted from the public, I was told that they did not stand in need of such deposits, for they had ample funds of their own. The deposits were accepted from other Sahukars simply to oblige them as they were their regular customers. Usually this firm does not stand in any financial help from outsiders.

Loans.

As already remarked, this firm acts as a depository and reservoir to other Sahukars who lodge and withdraw their funds as and when needed. Loans are granted to other Sahukars on the security of gold ornaments, Government bonds, company shares or other moveable property at a rate of interest varying from six to nine per cent up to seventy-five per cent of the value of the property offered as security. Loans on immoveable property are also granted at a rate of interest varying from 9 to 15 per cent. Loans without any security are also granted to the clients who are well known to the firm, but the amount of such loans is small and the rate of interest charged is much higher than the usual rate. Loans are also granted to persons other than Sahukars. The chief customers of this class are the nawabs and jagirdars of the State. Such loans are purely for non-productive purposes. Most of the borrowers just squander this money. The rate of interest charged on moveable security is 9 to 15 per cent and on immoveable security or personal security 12 to 24 per cent. Generally such persons are given standing

credit with the firm and are allowed to withdraw money by cheques issued by the firm. As the firm has a good standing, its cheques are accepted by the Imperial Bank. This practice is similar to that of the Wool Companies of Australia that give standing credit to their clients and monies can be withdrawn by cheques as and when needed. At the district branches of this firm loans are also granted against the security of agricultural produce and the rate charged is about 12 per cent per annum. The produce has to be stored in the firms' godowns. Such loans are granted only for short periods. If the loan is granted against the security of cotton, it must be insured against fire. In case of other commodities insurance is not considered necessary. If the borrower does not arrange to repay his loans within few months, the stored produce is sold and from the proceeds of the sale their advances are realised. Loans are also granted to cultivators for various other purposes but the rate of interest charged is much higher. On the whole a very negligible proportion of their funds is invested in agricultural loans. Mainly they finance small Sahukars who in turn finance consumption, and they themselves give big loans to nawabs and jagirdars which is mainly for consumption and leading a life of luxury. Until a few years ago a good deal of their funds were advanced to jagirdars and nawabs on personal security and landed property. The rate of interest charged varied from 12 to 24 per cent, but lately such loans have been restricted as H. E. H. the Nizam's Government has passed a law to the effect that jagirdars are only personally responsible for their loans and their jagirs cannot be attached in default. Moreover a spirit of general consciousness has risen in the public and loans are not repaid without resort to the law courts which involves a good deal of expense to the firm.

Dealing in Hundis.

This is one of the biggest hundi-dealing firms in Hyderabad. It has a branch in Bombay, and hundis are mostly issued on this branch. However this firm does not deal in hundis for the public at large. Hundis are generally granted to other Sahukars and bankers and are rarely for sums below Rupees 20,000. I understand that even the Central Bank of India, and the Imperial Bank of India buy hundis from this firm.

Honesty in the Hundi Business.

The Indian Sahukars deserve high praise for their honesty in dealing with hundis. This high level of honestly has been

seldom exceeded by any country in the world in any known period of History. The hundi of a respectable Sahukar is considered the safest paper. In this connection it will not be out of place to remark that the level of honesty in the mutual dealings of Sahukars especially between Marwadi Sahukars is very high. Funds to the extent of several Lakhs of rupees are borrowed by a verbal request and it is very seldom that any trouble arises in re-payment. The business of these big Sahukars is mostly managed by their Muneems who are well known for their honesty. They get an ordinary salary—Rs. 75 to 125—and are entrusted with funds to the extent of several lakhs, but one rarely hears any case of embezzlement or misappropriation of funds. Another praiseworthy thing is that unlike ordinary cashiers they are not required to deposit any security for the post. The Bombay Muneem of this firm who is said to be one of the highest paid Muneems in India and is in charge of funds to the extent of a crore of rupees gets a salary of only 200 rupees per month. Here is a lesson to learn for those who maintain that low pay and honesty and responsibility do not go together. It is not possible within the scope of this paper to describe the business done by various other "bankers" of Hyderabad. This firm is typical of the big "bankers" and the others are doing practically the same business on more or less the same lines. So it is not necessary to describe the business and the methods of other firms of indigenous bankers in this State.

The Extent of Moneylending Business.

It is not possible to give any accurate figures regarding the extent up to which these leading indigenous bankers have made advances, for they do not show their books, and in this State there is no income-tax, so no idea could be had of the total amount a firm advances. However I have succeeded in getting the approximate figures of the loans advanced by Sahukars whose capital is over one lakh of rupees. It is roughly estimated that they have advanced 14½ crores of rupees. These loans can be classified according to the security on which they are advanced as follows:—

Advanced on immovable properties ...	.. 7 crores.
,, ,, movable properties (jewellery, etc.)	... 2 crores.
,, ,, the security of Government papers	... ½ crore.
,, ,, personal security ...	... 5 crores.
Total ...	14½ crores.

One very interesting fact is clear from this statement and that is even the leading indigenous bankers of this State have made advances to the extent of about one-third of their total advances on personal security. This again shows that the distinction drawn by the Punjab Banking Enquiry Committee that the indigenous banker more often than not does not advance monies without any security is not correct. What proportion of these advances is for productive purposes and what proportion is for un-productive purposes cannot be said with any approach to accuracy. However I have made enquiries and I understand from many reliable sources that only about 50 per cent of these loans are for productive purposes. This figure of rupees 14½ crore does not include any advances made by the joint-stock and co-operative banks, nor does it include sums lent by moneylenders whose capital is less than a lakh of rupees.

Indigenous Bankers Doing Proper Banking Business.

Those firms of indigenous bankers who are doing banking business proper, and by proper banking business I mean accepting deposits as a regular feature and even more important than this depending on their working capital chiefly on deposits and not on their private fortunes, have recently come into existence in Hyderabad. The number of indigenous bankers who are doing proper banking business in the above-mentioned sense is very small in India. I am given to understand that there is only one firm of indigenous bankers doing proper banking business in U. P. at Meerut, and one in Central India at Indore. In Hyderabad the number of such firms is three, and one at Secunderabad. One of these is very big and I shall describe its history in brief below.

Messrs G. Raghunathmal Bankers.

This firm is about 80 years old. Punamchand, the grandfather of the present banker, who was Oswal Jain, came to Hyderabad from Jodhpur State and started grain business. In 1913 his son Ganeshmal, the father of the present banker, started the exchange business, *i.e.*, converting O. S. rupees into British rupees and *vice versa*. For the benefit of those who are not familiar with the currency system of this State, I may be permitted to explain that the Hyderabad State has an independent currency of its own and its rupee is popularly called here as the O.S. or Hali Sicca. The Hali rupee contains half a "masha" less silver than the British rupee which is popularly here called

"*Kaldar*" or B. G. rupee. The standard rate of exchange for general calculation is O.S. Rs. 116-10-8 equal to Rs. 100. B.G. The minimum and maximum rate within which the exchange can fluctuate now is between Rs. 115-10-0 to 118-12-0 Hali = Rs. 100 B.G. These limits have been fixed by the State. If rates higher or lower than these prevail in the market the State through the Imperial Bank is prepared to supply the required currency at the above-mentioned rates. It is clear from the above that there is a fairly wide margin between the two extremes and the exchange business is a pretty lucrative one. Many small money-changers have sprung up in the State very similar to those that are seen in the Port towns, and find it a very useful side occupation. In 1918 Mr. Raghunathmal started a small bank on modern lines. As already explained, by modern lines I mean taking deposits both on fixed account and savings and current accounts as a regular feature, and allowing withdrawal by negotiable cheques. During the course of last 20 years he has built up for himself a very envious business. He started his banking career almost single-handed in a small shop on a very modest scale, and about four years ago he moved into his own building which alone cost several lakhs. In his banking establishment he now employs more than a dozen clerks. He handles every types of banking business. He has three branches and several agencies. He has correspondents in many European countries and the U.S.A., and undertakes to supply foreign exchanges. His rate for remitting funds from Hyderabad to Bombay is only one anna per hundred rupees or less and is perhaps the lowest in India. The Imperial Bank and other joint-stock banks charge four annas per hundred rupees for small remittances.

Following are the rates of interest which this banker allows for various types of accounts:

Current account	... ...	2 per cent per annum.
Special savings bank account	...	3 per cent per annum.
(Withdrawable by a cheque every day with a maximum of Rs. 500 per week).		
Savings account	... ...	3½ per cent per annum.
Fixed deposit for 6 months	...	4 per cent.
Fixed deposit for 1 year	...	4½ per cent.

One may be led to the conclusion that the popularity of this indigenous bank is due perhaps to the high rates of interests.

But on closer examination one finds that this is not true. High rates of interest is a common feature of most banks in the South. The chief cause of his success is the convenience which the depositors get at his bank—a facility not easily available at other commercial banks. Within few minutes of the presentation of a cheque money is paid to the clients without bothering them. On the contrary it is an ordeal of the first degree to get a cheque cashed, say at the Imperial Bank. In most commercial banks there is too much red tape and rigidity which has seriously hampered the development of banking in our country. The convenience of the customer is the last thing considered. While in foreign countries it is assumed that one who comes to withdraw money is a "gentleman" unless it is proved to the contrary, in India our commercial banks presume that he is a rogue unless he proves himself to the contrary. What has been the result of this policy? The result has been that quite a considerable number of people who under the ordinary circumstances would have been prepared to trust their money to a bank, after experiencing great delay and annoyance prefer to look after it themselves by locking it in their homes, instead of trusting to a bank. As a result, in spite of our tremendous amount of hoarded wealth we have to resort to foreign borrowing. It has been repeatedly said that Indian capital is shy and Indians have been blamed for not cultivating the banking habit. But before condemning our people we must unreservedly condemn our commercial banks for their rigidity and red tape. In my opinion the major part of the blame lies on the shoulders of the commercial banks. Every bank clerk who gets 30 to 40 rupees a month assumes an attitude of a supreme monarch at the bank's counter. Having a little experience of the banking world, I have myself seen that people had to wait at times an hour or so for drawing money, because there was no peon available to take the cheques from the clerk to the manager, and of course the clerk thought it below his dignity to carry the cheques himself to the manager. Another great defect in our commercial banks is their rigidity. They follow the rules to the very letter. And banking is such a business that it can never succeed if it is made so rigid. It is the entire absence of this rigidity and red tape which has been mainly responsible for the success of Mr. Raghunathmal's bank. I know a large number of university professors who previously used to deal with the Imperial Bank, but have now opened their accounts with this bank. At present about 85 per cent of the university professors have their accounts with this bank, and it is general saying that "Raghunathmal will never

leave you stranded." If one is in need of money and it is urgent, he can knock at Mr. Raghunathmal's residence at any time and he is generally too pleased to give the money from his personal safe and adjusts the account in the morning. What a contrast with our commercial banks! There if unfortunately one reaches few minutes after the official closing time he will get a flat refusal. It may be said that it is possible for a private banker to do this but not for a joint-stock bank. Perhaps an Indian joint-stock bank may not be able to extend such petty courtesies, but foreign banks do. I shall give an illustration from my own experience. In 1933 when my boat landed in South Africa it was public holiday. I could not land because immigration authorities wanted a cash security before I was allowed to put my step on the South African soil. I had no cash except a draft which was on the London Head Office of the Cooks. I telephoned the Manager of the Durban branch of the Cooks at his residence explaining my difficulties and within one hour I was supplied with the requisite amount of money. Here is an example for our commercial banks to follow. If they come down a little from their high pedestals they will find that Indian depositors would not be slow in entrusting their money to them. Unless personal element is introduced in our commercial banking system it is my firm conviction that no progress can be achieved in developing the banking habit amongst the masses.

In Hyderabad and Secunderabad there are about half a dozen indigenous bankers who have opened such "banks" and I understand that they are doing very well. People bank with them for the very simple reason that they find it very convenient. I do not think if any useful purpose will be served in describing the activities of such other indigenous bankers. Suffice it to say that they have all made a radical departure from their hereditary system, where very rarely any deposits are accepted and all the account-keeping is done in Marwari. Now these new types of bankers do the proper banking business, and keep their accounts in English, and it is in this direction that the future of indigenous banking lies in India. The problems which face such types of bankers, I shall consider in a movement. Here I would like to be permitted to describe in brief the business carried on by another type of indigenous bankers which is rather unique.

S. Girdharilal & Sons, Regimental Bankers.

This firm was established in 1877 and since that date it has been carrying on banking business on more or less the same

lines as the firm of G. Raghunathmal. The chief peculiarity of this firm is that since its establishment it has acted as regimental bankers to British Regiments. They have branches at Bangalore, Coonor, Volcoda and Metur projects, with their Head Office at Secunderabad. They cater principally for the banking requirements of the British Regiments. They have been officially recognised for that purpose and have to keep a certain amount of security with the military authorities. In addition to this work they also keep the private accounts of many military Officers and the public at large. I have been told that they have over 1000 such accounts. They open only current accounts and interest at the rate of 3 per cent is allowed on daily balances. I was very much surprised to see the simplicity and the unpretentiousness of this firm. Although they are multi-millionaire, they are still following the proverbial simplicity of old indigenous bankers. One very praiseworthy feature of this firm is that they have copied all the good characteristics of the English banking system, *i.e.*, receiving money by pay slips, issuing cheque books and pass books, accurate understandable account keeping in English etc., but they have not fallen victim to their expensive standard of upkeep and establishment which most of our joint-stock banks are foolishly imitating. For those people who "cannot think of a bank except as a lofty and spacious hall with shining counters and a large army of clerks and peons" there is a lesson to learn from this firm. And they must not forget, "that a security of a bank lies in none of these things, but in the rigorous cutting down of charges, in honesty, integrity and efficiency of management. In a vain attempt to win the confidence of the public expenses for spectacular shows are undertaken which are not at all warranted by the volume of the business."[2]

Critical estimate of the indigenous banking system.

It was in 1931 that I first read the reports of the Central Banking Enquiry Committee and the Punjab Banking Enquiry Committee, and I discovered that a class of indigenous bankers quite distinct from the Sahukars existed in the country. I very much doubted the existence of such a distinct class of so-called "bankers." I knew one of the leading indigenous bankers of the Punjab and found that his activities were not distinctly

[2] Early European banking in India by Sinha quoted by the Central Banking Enquiry Committee, page 526.

different from the other moneylenders. No doubt he dealt in Hundis on quite an extensive scale and did grant loans on quite reasonable rates of interest to traders and commercial people. But that was only a part of his business. His main source of income, and a very lucrative one too, was earned by lending money to young "raises" whose fathers had died recently and who were leading a life of luxury and very often that of debauchery. Cases have come to the notice of the writer and the matter is on record of various Punjab Courts that many leading Punjab indigenous bankers at many a time have given a loan of Rs. 50,000 and have extorted a promissory note for Rs. 100,000. I am not giving extreme examples. Such cases happen very frequently and in almost every part of India. I carried my doubts with me to England and discussed the matter with many competent persons there, but they more or less repeated the same things that were described in the Central Banking Enquiry Committee's Report. On my return to India, I joined the Agricultural Credit Department of the Reserve Bank, and as the Reserve Bank was to report on ways and means of linking the indigenous bankers with the Reserve Bank, I had great facilities to study this matter. I visited various indigenous banking firms in different parts of India but found that a preponderating majority of them were more or less glorified moneylenders. They did not receive regular deposits, and even those who did, did it as a side show to oblige their friends and clients. Judging the Marwari and Multani bankers of Bombay by the definition of the Central Banking Enquiry Committee, we cannot distinguish them from the Sahukars and moneylenders. No doubt they do very large business in hundis, and finance trade and industry, but they do not receive regular deposits, and those who do, the deposits do not constitute any considerable part of their funds, which consists mainly of their own or their near relative's savings. But my fundamental objection in not including them in the category of bankers is that they carry on other trades which are highly speculative and they do not draw any line of demarcation between any of these different activities. They gamble a good deal on the stock exchange and speculate in cotton. I have already described the activities of a typical firm of indigenous bankers in Hyderabad which has a capital of over 5 crores, but this firm too does not fundamentally differ from ordinary moneylenders. The difierence is only that of a degree.

I do not deny the usefulness of indigenous bankers, nor do I want to belittle the important part which they play in

greasing the wheels of trade, industry and commerce, and the very important position which they occupy in the financial structure of the country. To-day they are occupying the same position in the country which the country bankers and the firms of goldsmiths occupied in Great Britain during the 18th and the early parts of the 19th century. But these institutions had to give way to the joint-stock banks and (before the amalgamation movement had themselves formed into small banks) similar events are bound to follow in India and sooner we recognise this the better both for the country and for the indigenous bankers. I think great dis-service has been done to the country by the Central and Provincial Banking Enquiry Committees in focussing the attention of the country to a class of bankers, *i.e.*, indigenous bankers, which really does not exist in this country and the matter has been made worse by the provision in the Reserve Bank Act to link the indigenous bankers with the Reserve Bank. I think no useful purpose will be served by insisting that a class of indigenous bankers exist quite distinct from the Sahukars in the country. It is better for us to realise that the problems which we have to face are the problems of Sahukars and proper attention should be devoted to understanding their problems most sympathetically. Now I shall briefly examine the problems of Sahukars and make suggestions for improving their service.

The Future of Sahukars and Their Problems.

A question of fundamental importance and of great practical utility arises as to what is the future of the Sahukars and what steps should be taken to brighten their future and to link them with the money market of the country and ultimately with the Reserve Bank. There is no denying the fact that the Sahukars are the most important credit agency of the country, and all the other agencies combined together, *i.e.*, co-operative banks, joint-stock banks, exchange banks, the Imperial Bank of India, and such other financial agencies, do not supply even the most insignificant part of the credit needed for the requirements of agriculture and commerce and industry in this country. It is highly desirable that all possible efforts should be made to get the maximum amount of benefit from this most important credit agency of the country. Recently a good deal of attention has been attracted by the scheme prepared by the Reserve Bank to link the indigenous bankers with itself and to provide them with financial accommodation whenever necessary on more or less the same terms as is provided to the other member commercial

banks. In order to be eligible for the membership of the Reserve Bank the indigenous bankers have to fulfil the following conditions:—

(*i*) They must confine their business to banking proper as defined by the Indian Companies Act. Any other business that they might be conducting should be wound up within a reasonable time.

(*ii*) They must maintain proper books of account, and have them audited by registered accountants; the Reserve Bank will have the right to inspect the accounts and call for any information necessary to determine the financial status of the banker.

(*iii*) They must file with the Reserve Bank the periodical statements prescribed for scheduled banks. They must also, in the interests of their depositors, publish the returns prescribed for banking companies by the Companies Act and be liable to the same penalties for non-compliance.

(*iv*) The Reserve Bank will have the right of regulating the business of the bankers on banking lines, when necessary.

(*v*) During a period of five years from the date of their registration as private bankers in the books of the Reserve Bank, they will be entitled to open an account at any of the offices of the Reserve Bank and be otherwise subject to the same conditions as the scheduled banks except that during such period they will not be required to furnish the compulsory deposits set out in Section 42 of the Reserve Bank Act, unless any of their weekly statements discloses that their time and demand liabilities are five times or more in excess of their capital in the business.

(*vi*) If an indigenous banker does not incorporate himself under the Companies Act, his liabilities in respect of his banking commitments will be unlimited. He should therefore state the amount of capital he has available for banking business. (Bankers with a capital of less than two lakhs are not eligible for the Reserve Bank's membership.)

(*vii*) When required they will have to indicate:—

(*a*) the names and the extent of interest of their business partners, if any; and

(*b*) if any of the bankers is a member of a Hindu joint family, the names and interests of the co-sharers. In both the cases statements will be required from the co-sharers that they are prepared to take their full share in the business and its liabilities.

(*viii*) This scheme will be a tentative one for a term of five years, but before the end of this period the Reserve Bank will frame proposals for legislation, if it thinks fit, further to coordinate or regulate the position of the private banker. It is likely that such legislation would take the form of a separate Bank Act as suggested by the Central Banking Enquiry Committee or otherwise to standardize and coordinate the status of these registered private bankers on lines in consonance with the scheduled banks.

The Reserve Bank scheme is quite admirable from the theoretical point of view but as far as its practical utility is concerned it has not any, for a very fractional minority can fulfil such conditions. For instance, how many indigenous bankers there are in this country who confine their business to banking proper as defined by the Indian Companies Act?

If the Reserve Bank scheme is accepted as it is, it will not be possible to bring any considerable number of indigenous bankers within its circle. I think the fundamental defect in the Reserve Bank scheme is that it has failed to realise that no class of distinct bankers exists in the country separate from the Sahukars and unless and until the problem of ordinary money-lenders is not faced and successfully solved, I am afraid the talk of indigenous bankers and linking them with the Reserve Bank will not bear any tangible fruit. The fundamental difficulty is that these so-called indigenous bankers do not want to link themselves with the Reserve Bank for the simple reason that they do not want any financial help from the Reserve Bank especially at the cost of observing the conditions imposed by the Reserve Bank. They frankly ask what will the Reserve Bank do for us? When they are told that they will be able to get their paper discounted from the Reserve Bank and shall get very

valuable financial accommodation, they reply that they do not stand in need of any such help. As a matter of fact at present they possess far more funds than they can possibly utilize with safety. So in the absence of any attraction for them to join the Reserve Bank they will keep away from it, with the result that the present conditions will continue. I think the only way to link them with the Reserve Bank and to make them serve the useful purpose of financing trade, industry and agriculture is that the problem of moneylending must be firmly tackled. No person should be allowed to lend money except by taking a licence from the magistrate of the district in which he wants to do his business, and before such a licence is given enquiries should be made about the character of the moneylender, the necessity of moneylenders in any existing areas, and it should be one of the conditions of granting a licence that he will have to keep proper accounts, and furnish receipts of all sums taken and given, and should submit every six months a statement of account to each of his debtor. When any frauds are detected in his dealings heavy penalties should be imposed on him and his licence confiscated. A law should also be made to the effect that no money should be lent without any tangible security except at lender's own risk. Such rigid regulation of money-lending will certainly curtail the credit of the borrowers, but this in itself is not a great evil, if credit for unproductive types of expenditure is drastically curtailed. In this country where money is recklessly borrowed for most frivolous purposes and where more than 70 per cent of the loans of the agriculturists—the most predominant class of borrowers of the country, are for unproductive purposes. I think no harm will be done if their credit is curtailed. It is interesting to note that recent schemes of debt relief have scared the moneylenders a good deal and they have very drastically restricted their lending activities. But on the whole the ryot has not been any worse for it. As a matter of fact all available reports show that this restriction of credit had a very desirable effect on the ryots by forcing them to curtail their expenditure on ceremonies and other such unproductive indulgences. A farmer borrows for such purposes because his neighbour is borrowing, and if his neighbour cannot borrow and spend money lavishly on his son's marriage, he does not mind the least if he cannot himself indulge in celebrating the marriage of his own son on a pompous scale. In the long run the investors are themselves bound to gain by following such a policy of granting credit for productive purposes only. In return for registering, the Government should provide every facility for

recovery to such registered moneylenders, and hypothecation of standing crops and cattle should be allowed by passing a law for allowing chattel mortgages. The same facilities should be allowed to such registered moneylenders as are allowed to the cooperative societies in recovery of their loans. The accounts of such moneylenders should be regularly audited by a qualified auditor at least once a year. A very great defect of the existing indigenous moneylending system is that great mystery hangs about their activities and great secrecy is kept about their financial standing. Even those who receive regular deposits do not publish their accounts for the information of their depositors.

My main criticism of the modern type of indigenous bankers of Hyderabad, including the bank of Mr. Raghunathmal, is that although they derive a major part of their funds from their depositors they publish no balance-sheet, and the depositors are kept in absolute darkness about their financial standing and other activities.

I propose that those moneylenders who possess a capital of at least one lakh or over should be eligible for the membership of the Reserve Bank and should be allowed to discount their paper up to at least five times their capital and reserves. Those moneylenders who discount their paper with the Reserve Bank should not be allowed to charge a rate of interest higher than 3 per cent of what they pay to the Reserve Bank. This will bring real relief to the worthy borrowers and will be of great asset to honest moneylenders. The adoption of this procedure will do away with the necessity of getting the Sahukars registered under the Indian Companies Act, for they will be registered under the Moneylenders Act. It will bring the leading Sahukars within the beneficial influence of the Reserve Bank and it will be easier for them to get financial accommodation. The cost of productive credit will be reduced, unproductive credit will be restricted, and thus the country will derive a real benefit.

NIDHIS OR LOAN SOCIETIES OF MADRAS

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Sound credit has depended in the past, as it will depend in the future, on the confidence of the lender that principal and interest are safe and on the satisfaction of the borrower that he has got the money at the time he wanted, on terms not difficult for him to keep. The third essential of sound credit is the proximity of the lender to the borrower so that transactions can take place without inconvenience to either party. From the middle of the 19th century sound and continuous credit has been secured in Europe for men of limited means by popular co-operative banks of several classes started by *Schulze-delitzsch and Raiffeisen.* At about the same time the problem of cheap credit to the same class of people was tackled in Madras by a type of indigenous banking which developed from the *Kuttu-chit* system which prevailed at the time. They are the Nidhis or Loan Societies.

The leading idea of the Nidhis is mutual credit. A certain number of members form a company under the Indian Companies Act and attract other members. Monthly subscriptions are paid for a given term (45 or 84 months usually) at the end of which the fund closes and profits are divided. Members may also get loans from the Society repaying them with interest by monthly instalments. Though these societies are modelled on the Building Societies of Great Britain and the United States of America, they must have developed from the indigenous practices, *viz.*, the *Kuttu-chit* system. But the authors of the Madras Banking Enquiry Committee are of a different opinion. They say: "Nicholson has in his report grouped together *chit* funds and Nidhis. They should, however, be regarded as quite distinct and they have a definitely different origin. The Nidhis or funds have had a definite gravitation towards the permanent bank receiving deposits and making loans, while the *chit* fund has remained as an association in which members subscribe and lend the subscription among themselves, though surplus cash may be lent out as temporary investment at the discretion of the promoters." Since the foundation principle of the Nidhi,

namely, mutual credit, is the essential feature of the *Kuttu-chit* fund system also, it may be legitimately argued that the one is a development of the other.

The *chit* system is based upon association, confidence and honest dealing. According to this simple system a number of men in a village unite to subscribe a small sum each, usually a rupee or a multiple of that, to the promoter called 'Karaswan' for a specific period. At each period—generally at the end of every month—when collections are made, the collection so made is given to one of the members of the *chit*. Different methods are adopted to decide the member who is to be given the amount. The original system is the head and tail system. Lots are drawn and the winning lot draws the pool. While the same number subscribe for the next months, the winner drops out. Here the tail is the less fortunate; it loses by way of interest. To equalise benefit, the winner gets the amount less a deduction of interest and the deduction is divided among other members who have not won the pool. This is the discount system. A third system is that of auction. This sought to obviate the difficulties of those needy who may not win the pool. By this system the pool is put up to a Dutch auction and the highest bidder of discount receives the amount, while the discount is divided among the rest as bonus. Care is taken to see that the benefit of the bonus does not extend to those who have already received the pool. The person who receives the amount executes a pro-note or mortgage to the foreman and drops out of the next auction. In cases of default penal interest is charged. Besides, there are shandy associations in which small traders unite their small subscriptions on market day. *Chits* are run on commodity basis also. In the absence of saving institutions and facilities for cheap credit the *chit* system was of immense benefit to the people. The system not merely promoted thrift among the subscribers but also enabled them to get lump sums for purchasing land, jewellery, etc., for marriages, for trading operations and for settling prior debts.

These advantages must have been realised by those who started about the middle of the 19th century the Sudder Court Fund which seems to have been inspired by the Chit Fund System. Realising that they were ruined by the usurious rates of money-lenders certain officials of Madras started a fund, similar to the *chit* fund, to borrow money at equitable rates whenever they needed. The Fund was a terminating society with a seven years' period. Loans were granted for 84 months at the end of which period the fund was to be wound up and shares repaid at Rs. 102-8 for Rs. 84 received. From the monthly collections

loans were granted to members at $6\frac{1}{4}$ per cent. Penalties were levied for delay and loans repayable by monthly subscriptions were usually advanced on mortgage and the order of granting them was determined by lot. The Fund soon became permanent and a new series of subscribers was admitted and shares opened every month with the result that there was a continuous influx and efflux of members. This is the first instance of a Nidhi that we hear of in Madras. Other features of the *chit* fund, namely, the putting up of their loans to a Dutch auction, the issue of loans by lot in addition to the terminating character of the original fund were also borrowed by some Nidhis. So the statement of Nicholson that 'these societies might almost have been developed from indigenous practices, *viz.*, from *Kuttu-chit* system' cannot be brushed aside.

But at the same time it must be admitted that the Nidhis of Madras bear a striking resemblance to the Building Societies of Great Britain which are practically Building and Loan Associations. Their purpose is to raise by the subscriptions of the members, as the Nidhis do, a stock or fund for making advances to members upon security by way of mortgage. Most important among the methods adopted by these societies are the association of varying numbers of members, periodical payment of share subscriptions by members, borrowing from outside up to 2/3 of the amounts advanced on mortgage, the lending out of these funds to members, and of their repayment by instalments. While these features are common to Nidhis and Building Societies the latter have a special feature in that they are governed by an Act, namely, the Building Societies Act of 1894. They are incorporated by registration by the Registrar of Friendly Societies who is given extensive powers of control. There is no evidence, however, to prove that the main principles of the Building Societies were introduced into Madras and were borrowed by the Nidhis.

To continue the history of the Nidhis in Madras it may be pointed out that the Sudder Court Fund continued prosperous till 1872 when many others were started in imitation of the original. The growth of a large number of mushroom Nidhis at this period led to the abuse of this institution. Instead of being guided by the motives of thrift and mutual benefit the system began to be used merely for securing high profits to the promoters. Towards the end of the year 1872 the decision of the High Court that the Nidhis had no legal status since they were not registered under the Companies Act led to the collapse of many societies. They could not go to court and since debtors refused to pay, many had

to go into liquidation. Very often unscrupulous and incapable men replaced honorable promoters, high salaries were paid to directors, promoters and staff, impossible profits and splendid promises were dangled before the greedy eyes of subscribers, and when a good number of dupes had been hooked in, the fund closed its doors. These sham societies were nicknamed *Lubbuck* Funds. While in 1887 there were 269 societies, in 1892 there were only 135. During the interval many societies sprang up and vanished, the numbers that disappeared being not less than 260.

No doubt the Nidhis of to-day are working on better lines but there has been no appreciable increase in their number. In 1929 there were only 228 Nidhis in the Madras Presidency with a paid-up share capital of Rs. 2,49,09,533. Definite figures are available only for 218 Nidhis; these have a total paid-up share capital of Rs. 2,44,56,621, deposits running to Rs. 1,16,16,695 and reserves amounting to Rs. 31,94,926. Curiously enough more than half the number of Nidhis (123) are in Coimbatore town and in the surrounding villages of the district. These Nidhis have developed in the course of a long period of 70 years and they differ from one another so widely that there seems to be little in common between the extreme types. Having regard to the pathetic helplessness of a majority of the population the policy of *laissez faire* has to be given up. In order to check possible abuses legislation is definitely called for.

In general the objects of the Nidhis were to save members from the evils of usury, to stimulate thrift, to facilitate savings, to relieve members from old debts and to provide for accumulation of funds for special purposes like domestic ceremonies, house-building and repairs or the purchase of jewellery, etc. Salaries and profits for the promoters must also have been a secondary, though unexpressed, object. The receipt of deposits is only a later feature of the Nidhi system; though in some Nidhis of Coimbatore deposits are larger than the paid-up share capital, in most they are small, and in some, altogether absent. For example, in 1929 the Tanjore Permanent Fund had 23 lakhs of share capital and current deposits amounted only to Rs. 3 lakhs. The Tanjore Fund does not receive fixed deposits. So these societies are less banking institutions than mutual loan associations. In Coimbatore, however, some societies are indistinguishable from Joint-Stock Banks.

Turning to methods of business we find that the *clientele* of the Nidhis is usually officials, traders, merchants, agriculturists and rarely the lower classes. Figures given below show the percentage in each class for certain Nidhis in 1929.

	Traders.	Government and Railway officials.	Dhobies.	Railway workers and labouring classes.	Weavers and Agriculturists.	Building Contractors.
Coonoor Nidhi ...	40	20	7½	32½		
A. B. K. Nidhi, Avanashi					100	
Ootacamund Nidhi ...					90	10
Janopakara Nidhi, Coimbatore ...	60	5			35	

In the Tanjore Permanent Fund a special feature is that agriculturists form an important class who get accommodation in the Nidhi. The A. B. K. Nidhi lends cent per cent to agriculturists. The loanable funds proceed chiefly from the subscriptions of members since they rarely get accommodation from other banks. Therefore their total working capital is about Rs. 4 crores made up of a share capital of about 2½ crores and deposits of 1½ crores.

Though the original Nidhis did not accept deposits, at present some have restricted it to members—thus strictly conforming to the principle of mutual association—while most take them from any one. In the moffusil, deposits are mostly for large sums by a few persons; they are not the petty deposits of the masses. A case in point is a Nidhi at Villupuram where the deposits of a few thousands of rupees are generally those of the moneylenders. There are cases in Coimbatore where the deposits are five times the share capital. The Coimbatore Janopakara Nidhi, for instance, had in 1929 a paid-up share capital of Rs. 1,32,500 while deposits amounted to Rs. 5,55,835.

In all these Nidhis the rate of interest is not uniform; it ranges from 2 per cent on current deposits to 8 per cent on fixed deposits. The following table shows the rate per cent in some Nidhis:—

	Current.	Temporary.	Fixed.	Savings.
Nellore Permanent Fund ...	2	4½-5½	6	...
Egmore Benefit Society ...	4	...	6	8
Tanjore Permanent Fund ...	2	...	...	...

Generally speaking the securities offered by the Nidhis for deposits are unsatisfactory and even non-existent. The direct guarantees to the depositor are the status of the society, the reserve if any and amounts due on shares. In the absence of substantial reserve funds very often loans have to be attracted at high rates when a large number of shares matures at the same time. No doubt when societies lend only on mortgages and very little on personal security the depositor is more or less sure not to lose his money. But the confidence of the depositor depends ultimately on solid guarantees, on a large reserve fund securely invested rather than on high rates of interest. The Janopakara Nidhi at Coimbatore has no sufficient security for the five lakhs of rupees deposited with it. The Reserve Fund amounts only to Rs. 96,725. The secretary of the Nidhi contends that in case of a run, money will be recovered from those of the customers who have borrowed sums payable on demand and in addition from the $2\frac{1}{2}$ lakhs advanced on the security of jewels. This will undoubtedly involve delay; and the only sure guarantee for depositors is the presence of a large reserve fund. Considering the fact that Nidhis are mutual benefit associations they should, as far as possible, avoid taking deposits from outsiders.

At the most the reserve amounts of all the Nidhis in the presidency together amount to Rs. 35 lakhs while the working capital comes to about 4 crores, and the deposits to $1\frac{1}{5}$ crores. Every year only a very small percentage is taken to the reserve and even this is often broken into and divided at the end of three or four years. Very often the reserve is laid out in charitable investments or in ordinary loans which involve great risks. This unsatisfactory state of affairs must be ended by setting apart a substantial portion of the profits as reserve to be deposited in gilt-edged securities.

The money raised by subscriptions and deposits and, in most cases, the reserve funds are lent out chiefly to members. Nicholson says that in Madras mortgages and pledges of jewellery or government paper are preferred to personal securities while in the moffusil the reverse is the case. In Madras personal distrust and facilities for bankruptcy, a good system of title and ease in recovery of debts make mortgages preferable; while mortgages are avoided in the moffusil because of the difficulty of titles and the revenue law for the collection of arrears. According to the Madras Banking Enquiry Committee Report, the Nidhis in Coimbatore lend a large percentage of the loans on personal security. But loans on goods in godowns, on jewellery,

on immovable property, on share capital and on deposits, though small, are quite common.

In Coimbatore Nidhis, the rates of interest on personal security range from $11\frac{1}{4}$ per cent to 18 per cent, on loans on share capital from $7\frac{1}{2}$ per cent to 12 per cent, on deposits from $7\frac{1}{2}$ per cent to 12 per cent, on jewels from $8\frac{1}{4}$ per cent to 15 per cent, on goods from 9 per cent to 15 per cent and on immovable property from 9 per cent to 12 per cent. The Tanjore Permanent Fund lends on shares, on immovable property and on jewels. No personal security is recognised. Loans are given on the amounts actually subscribed at $6\frac{1}{4}$ per cent. These are discharged automatically at the end of the period when the shares mature. Special loans on immovable property and jewels, for Rs. 100 and Rs. 250 respectively are charged at the rate of $7\frac{1}{2}$ per cent per annum. A portion of the loan amount and the interest are repayable monthly in the form of share subscriptions, while the major portion of the loan is paid at the borrowers' convenience within the time fixed for the maturity of the shares. The rate of interest charged by this Fund is lower than that levied by the Primary Co-operative Societies. Lending on produce, except on groundnuts which is liable to seasonal changes, is being started. The Nidhis have no godowns and the produce is stored in the borrowers' godowns and sealed.

Generally there are three classes of loans though in some Nidhis (*e.g.*, the Madura Permanent Fund) there are four classes and in some others only two. The first of the three classes consists of regular or permanent loans to subscribers on mortgage, on pledge, on government paper, on paid-up subscriptions and on personal security. Such loans are repaid as in the Building Societies. The second class of loans are the temporary or extra loans to members or outsiders for short periods of three to six months repayable in lump. The third class consists of small lot loans of Rs. 5, 10, or 20 repayable in one to three months. A special feature of the Tanjore Fund is the grant of loans to agriculturists for long terms repayable at the borrowers' convenience. Interest should be paid regularly; but in case of default the penal rates charged are excessive.

Loans are granted in these societies according to priority of application. Some adopt the auction premium plan while others simply decide the question by lot. In most Nidhis, especially those in Coimbatore, there is of late a wide difference between the lending and borrowing rates. It would be of great benefit to agriculturists if loans are made repayable at the time that they sell the produce.

In the original societies profits arose because of late payments by members. In the Nidhis of the later period the difference between the rates of borrowing and of lending makes for profit. This difference in rate militates against the basic principle of the Nidhis, *viz.*, mutual benefit, since the bulk of the profits goes to non-borrowers, directors, secretaries, etc. The first principle of mutual association demands that profits should be low and that as far as possible they should return to the members. To some extent this can be secured by diverting the major portion of the profits to a reserve fund.

Theoretically the Fund is administered by the members in the General Meeting. They select the directors, auditors, secretaries, etc., who are the only persons cognizant of the business and of the affairs of the Fund. The principle of one man one vote is followed as in popular banks and credit unions of Europe. The power given to the mass of members tends to prevent any diversion of funds of the society towards speculation or private interests. The stock vote is bad in principle as it gives the preference to capital over brains. In certain societies the stock vote is, however, adopted; the evils of the system can be minimised if a maximum of five votes is fixed for those who hold above a certain number of shares. This will, in addition, enable experienced members to prevent rash and negligent resolutions. The directorate consists of the most experienced men who retire by rotation but who are eligible for re-election. They are paid either a share of the profits or honoraria fixed from time to time. In Europe private businessmen with scanty leisure give gratuitous service to such societies. It was so in the earliest societies in Madras. Emoluments increased gradually resulting in a scramble for power and in the influx of inefficient directors. Though in most societies they get a good share of the profits only sitting fees are given in the Egmore Benefit Society. Restrictions from borrowing like other members are rarely found. The work of examining accounts and securities is usually done by permanent and special auditors. In most of the Nidhis while the former are usually some one of the directors themselves, the latter are professional men who may or may not be shareholders. The special auditors are appointed annually. Since the efficient working of a Nidhi is dependent very much on good auditing, care must be taken to appoint independent and able auditors. The secretary who is really the best paid is the manager. He commands large powers and influence and in most cases he is the chief promoter of the fund. Efficient working of a fund is in no little measure due to the ability and integrity of the

secretary; deficiencies in him have led to the liquidation of many a fund. The valuation of securities and their periodic verification is done by appraisers and trustees. Reports and balances are periodically drawn up. Co-ordination and central control are needed to see that reports are properly drawn up and that the articles are duly observed.

The Nidhis of the Madras Presidency have been registered under the Indian Companies' Act of 1913. The Nidhis differ from other banking institutions registered under the Companies' Act in that their share capital can be borrowed on, paid in instalments and withdrawn altogether at the end of a definite period. The principal sections of the Companies' Act which are a source of trouble and difficulty to the Nidhis are Sections 55, 57, 58, 92, 93 and 101 to 104. Sections 55, 57 and 58 provide against the reduction of share capital without sanction of the Court. The shares in a company cannot be withdrawn. Since the retirement of shareholders by lapse of time and the reduction of share capital every day are features of the Nidhi the decision of the High Court that the withdrawal of share money is illegal and that retired shareholders are liable for debts greatly upset the working of many Nidhis. Sections 92 and 93 relate to the prospectus of the company to be filed with the Registrar before it is issued. The Nidhis get fresh subscribers for shares often and they are put to the trouble of submitting their articles daily to the Registrar. Sections 101 to 104 relate to allotment of share capital. Allotment can apply only to fixed capital while the shares of the Nidhis are fluctuating. The Nidhis thus differ from Joint-Stock Banks in many important respects. Some of the Nidhis have so amended their bye-laws that the share capital is payable in a lump sum. Some have disallowed borrowing on share capital and some have abolished the rule that share capital is withdrawable. But most of the Nidhis retain their essential features. As they are profit-making institutions the Nidhis cannot be registered under the Co-operative Societies' Act. The Madras Banking Enquiry Committee observe in their report: "The fewer different kinds of banks and institutions there are the easier will it be for the general public to get to know the details with which they must be familiar if they are to take the fullest possible advantage of the facilities provided." With this object in mind they suggest that the Nidhis should alter their features so as to conform to the Indian Companies' Act. Such uniformity does not exist even in England where different types of institutions are regulated by the Friendly Societies' Act, the Building Societies' Act and other Acts. Having regard to the

services that the Nidhis are capable of rendering, far from stamping them out of existence, they should be fostered by suitable legislation. The Central Banking Enquiry Committee too hold that indigenous institutions like Nidhis and *chit* funds deserve to be encouraged.

Properly directed and controlled, it is evident, that the Nidhis of the Madras Presidency are capable of becoming centres of great usefulness to the needy majority of the Indian population. As originally conceived the Nidhi sought to encourage co-operative endeavour, to stimulate thrift and inculcate habits of punctuality and careful thinking ahead, in the minds of its subscribers. Small savings were duly cared for; and credit was easy since borrower and lender were well-known to each other and repayment easier because of the monthly instalments. To these advantages must be added the fact that the Nidhis are the results of indigenous activity and adapted to the habits and needs of poor folk.

What the Nidhis need to-day is reform and reorganisation; a widening of their sphere of usefulness, a strengthening of their economic position, a stiffening of the articles to make them sound agencies of credit and a co-ordination and central direction of their credit so that they may develop into useful units in the scheme of rural credit which is so badly needed to-day by our indebted peasants and workers. Reorganisation of the Nidhis should take the form of curtailing the interest of the Secretary in the Nidhi by making him a paid officer with no share in directing its activities except that of offering expert advice, reducing the emoluments of directors, making them honorary if possible and of tightening the control of the Nidhi on lending by keeping a watchful eye on the way in which the money borrowed is actually spent. It would be desirable if the Nidhi supervises the settling of the debts of the borrower with his creditors when the loan is advanced for that purpose. The sanction for the right working of a Nidhi must proceed from enlightened opinion of the subscribers and for this purpose uniformity and even some federal unity may be secured among the various Nidhis by legislation. When a society shows good and efficient work it may even be allowed to float debentures or call for deposits at reasonable rates. Personal credit is important in a country of small holdings like ours and if it is not abused will be a useful method of financing men of limited means. No agency is better calculated to regulate and utilise personal credit than the Nidhi system. The Nidhis can be developed to become healthy centres of economic and social progress.

To place the Nidhis and *chit* funds of the presidency on a secure basis and to regulate their working a special Act is urgently necessary. If properly reorganised these societies will prove to be of immense benefit to the agriculturist. Village societies must be built with a membership practically co-extensive with the population of the place so that it may take up within its ambit all useful forms of village activity. Small villages may group together to form a Nidhi. For this purpose areas of operation for each Nidhi may be delimited. A similar method can be pursued even in the case of towns.

As Nicholson rightly observes there can be no more philanthropic activity for public spirited men and women in India than to carry the spirit of *Schulze-delitzsch and Raiffeisen* into the villages of the country. Selfless work in little-known places, patient attention to the apparently petty tasks of village organisation, sacrifice away from the limelight, these are the things needed for building up a system of sound rural credit. This is infinitely more difficult than passing an act of legislature wiping off the debts. Debts once wiped off may yet return unless thrift and prudence are on the watch. But if a spirit of self-help is induced in the people, if they are made to realise that their salvation lies in joint endeavour on their own part, the effects of that change are sure to be enduring. And in bringing about this change of heart among the labouring classes no better method of credit can be devised than the indigenous system of *chits* and *nidhis*.

REGULATION OF INTEREST IN THE MADRAS PRESIDENCY, 1800—55

BY

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Usury is an ancient practice and Governments in various countries had adopted measures to check its evils. In England, usury laws were enacted from the sixteenth century. Similar laws existed in other European countries. In India, where custom took the force of law, the *damduput* prohibited interest from exceeding the principal and a hundred years ago a benevolent Maharanee of Travancore went further and ordained that interest should never exceed half the principal.

But systematic legislation on the subject was carried out in India only after the advent of the British. When the East India Company acquired possessions in India, they effected a momentous change in the land revenue system of the country by introducing compulsory and universal money assessments in lieu of division of crops. The *kistbandi* was not everywhere fixed to time with the harvests. It was the beginning of the era of cash economy. The ryots were thus led to resort to moneylenders regularly. At the same time the Company resorted to the open market for loans by the issue of bonds bearing 10 per cent, thus competing with the public for the available money in the country. These loans were not viewed with favour by a people unaccustomed to their Government borrowing publicly. It is quite possible that their anxiety to raise a loan successfully despite their offering only 10 per cent, while the prevailing loan rates of interest were very high, might also have influenced the Government to regulate the rate and thus narrow down the margin between the rate which they offered and the market rate so as to induce the moneylender to lend his money to themselves. All these must have led the Company's Government to step in to regulate the rate of interest. In this, as in the sphere of settlement of land revenue, the Company's civil servants were guided entirely by English experience. The mass of usury laws placed on the English statute book since 1545 and perhaps the pleas accepted by Locke and Adam Smith for a legal maximum rate of interest on the assumed necessity of protecting the simple and

discouraging the prodigal must have had considerable influence in the passing of the first usury law in India in 1793 (Regulation XV), the very year of the Permanent Settlement.

Regulation of 1802.

The first regulation limiting the rate of interest on loans in the territories subject to the Presidency of Fort St. George was passed in 1802. This Regulation XXXIV of 1802 was based on Regulation XV of 1793 of the Bengal Code. From its preamble it is evident that till then no general regulation was promulgated on the subject in the Madras Presidency. The regulation embraced all the loans that remained undischarged. It laid down that the Courts of Adawlut were not to decree interest at more than 12 per cent per annum; but if a lower rate was stipulated in the agreements, then only such rate was to be decreed. Further, where the interest exceeded the principal, the excess was not to be decreed, and, subject to certain proviso, courts were not to decree compound interest on intermediate adjustment of accounts. Bonds executed after twelve months subsequent to this Regulation bearing more than the legal rate were not sustainable in the courts. In cases of bonds executed prior to this Regulation, the creditor was entitled only to the legal rate of interest. The Regulation, however, was not to affect *respondentia* loans or policies of insurance; but was extended to arrears of revenue. In 1816 its operation was further extended to cover the decisions of the village panchayat, village and district munsiffs; and also to decrees when they were confirmed by an appeal either by a provincial court or Sadar Adawlut.[1]

Regulation of 1825.

In the beginning some bonds bearing higher rates of interest were filed in the courts in ignorance of the Regulation with the result that the principal was lost in all such cases. But those cases were only few.[2] When the Regulation was sufficiently known to the public, recourse to the courts ceased, and apparently other steps were taken by the creditors to get their money back. As the Collector of Cuddappah points out, "It certainly must have in some degree restrained, but all India know that it did not stop the rise of interest above the legal rate."[3] The Regulation

1 Regulations IV, V, VI & VII of 1816.

2 From the Collector of Cuddappah, 20-11-1827; In Cons. 10-12-1827.

3 *Ibid.*

could not restrain the rates of interest paid in cases of mortgages of bullion or jewels. Even in the cases of written agreements it was evaded in three ways: (1) by concealed agreements for additional rates; (2) by the retention of the illegal part of the interest out of the money lent by the creditor; and (3) by the addition of the same in the bonds to the sum actually lent. The result was very much what Jeremy Bentham had foretold to be the fate of all usury laws. It occasioned "falsehood, injustice and treachery in defendants; falsehood and subordination of false evidence in plaintiff and perjury in witness." Further, a drastic provision such as this must have had repercussion on the money market resulting in tight money. An amendment to the Regulation was thus called for. Meanwhile from the 'twenties of the last century prices had begun to slump, though it was seriously felt only from 1825. Land revenue collections were falling, as the ryots were finding it difficult to be financed in time by the moneylenders. This must have contributed to hasten the decision of the Government and in 1825 they passed a regulation modifying the Regulation XXXIV of 1802. Section 6 of the previous regulation was "considered objectionable on general grounds of policy"[4] and it was deemed sufficient to provide that the amount of interest stipulated in such bonds or instruments in excess of the legal rate was not recoverable. Hence Section 7 of the new Regulation II of 1825 provided that in cases where the actual rate of interest exceeded the legal rate, the principal was recoverable, but that the interest payable was to be reduced to the legal maximum of 12 per cent.

Influence of Classical Theories.

The effects of this Regulation in achieving the aims for which it was framed were vigilantly watched by the Government. In the very next year the district Collectors were asked to enquire into the working of the Regulation and the possibility of a further reduction in the legal rate. The reports of the district Collectors to the Board of Revenue are of great interest to students of economic history. They graphically reveal the state of rural finance during the period. But more than that, they reveal the extent of the influence which English economic theories had on the Company's civilians who, it must be remembered, were full one generation posterior to the civilians of the Permanent Settlement days. They had been trained in the Haileybury College

[4] Preamble to Regulation II of 1825.

where Malthus, as professor of History and Political Economy for a continuous period of twenty-eight years, was teaching the prevailing doctrines of classical economists to a succession of Company's civil servants. Meanwhile, Bentham himself, in a series of letters written from Russia in 1786, had so far worked up the theories of Adam Smith in regard to rate of interest that Adam Smith is said to have confessed before his death in 1790 that on this point the disciple had improved on the master. Malthus, Bentham and Mill were great wits that jumped together on many issues. Pitt had recognised that the writings of Bentham and Malthus had helped fatally to smash up his Poor Law Bill.

The majority of the Collectors were of the opinion that the Regulation did not succeed in restricting high rates of interest. Careful enquiry among the agriculturists revealed to them the innumerable ways in which it was evaded by moneylenders and the fraud and perjury it resulted in. It only affirmed their own faith in the classical doctrine of non-interference. But in this, some went to the length of Bentham in decrying all laws against usury, while others took op the more moderate attitude of Adam Smith that if a legal rate were to be fixed, it should be higher than the market rate. Besides such theoretical considerations, practical obstacles like evasion of law and difficulty of revenue collection also influenced in the shaping of their conclusions.

Benthamite View.

Mr. Harris, the Collector of Cuddappah, whose elaborate report attracted the particular attention of the Board of Revenue,[5] expressed himself strongly against any legal restriction on the rate of interest. He said that as the prices of all commodities are left to vary with demand, so also interest which is the price of "the contemporary use of money" should be allowed perfect liberty to vary with demand. He added that there always exists a market price of money, *viz.*, the rate of interest which is certain to operate despite all legal restrictions. So irresistible is the force of this economic law that "the natural price of money will make its way through a country with little obstruction, in defiance of the legislature of the most powerful Government . . . . Scarcity of money enhances its value; or the lower a country has its own scale of wealth, the higher is its interest."[6]

5 General Report of the Board of Revenue sent to the Court of Directors, 1830, pp 689—90.

6 From the Collector of Cuddappah, *op. cit.*

Mr. Nelson, the Collector of Tanjore, was also of similar view. He wrote:

> Where trade is stagnant or money plentiful, the rate of interest will fall of itself, but where money is in demand, the interest will rise and the surest legislative enactments are not adequate to repress it . . . . Money is only a representative of other goods and its comparative value must and will vary in proportion to its abundance or scarcity. If a restraint is held on its temporary transfer, we create a monopoly of it and so force it into unnatural state.

They were also fortified in their opinions by their knowledge of the failure and futility of similar usury laws in England. In the words of Mr. Nelson:

> With all the evils of the usury laws at Home before our eyes and the degenerate habits and feelings they have been the means of creating among those chiefly concerned in lending money, it will be prudent to pause before inflicting similar misfortunes on the inhabitants of India.[7]

Mr. Harris, a full-blooded Benthamite that he was, went even further and dwelt upon the blessings of a high rate of interest for India.

> When there is little money in a country, the natural high rate of interest so far from being evil to the people is their salvation. It prevents the waste of money and directs it in outlets where it is most wanted and most useful. It creates domestic economy and industry. So classes in general will live as sparingly as they can with comfort for two strong reasons, *viz.*, to avoid the necessity of borrowing and to obtain the advantages of lending.

Not merely were the natural high interest rates deemed to be beneficial, but any artificial reduction would even injure the best interests of the people.

> But if the legislature takes alarm at the high interest and reduces it to a lower rate . . . . the event is seized upon by the first-comers, most of which goes to add to the superfluity and to gratify licentiousness. A

7 From the Collector of Tanjore, 27-11-1827: In Cons. 3-12-1827.

> relaxation takes place in the care and exertion even on the prudent who see little profit in earning or less in saving. Many borrowers will abound and most or a large portion of them will be men of pleasure and extravagance. . . . . To lower and fix the price of any one of the commodities of household use tends to the waste and speedy consumption of that one commodity, to keep it from the market and to prevent its raising from the earth or issuing from the hands of man; but to lower and fix the price of money on which these commodities, numerous as they are, are dependent tends to the abuse, disappearance and non-production of them all; consequently to the extinction of money itself . . . . A low limit in the interest, so far as it is efficacious, causes stagnation of money and consequently stops labour, and it prevents wealth from producing wealth.[8]

Nor did Mr. Harris stand alone in this Benthamite praise of the benefits of a high rate of interest. The view that legal reduction of the rate of interest would encourage improvidence was also held by Mr. N. W. Kindersely, the Collector of Tinnevelly.[9]

Smithian View.

These Collectors wore the doctrine of *laissez faire* threadbare. They adhered to the full-fledged Benthamite view that the State must not interfere with the free forces of supply and demand in the money market at any cost. But there were other Collectors who took their stand on the earlier views of Adam Smith and Locke that the rate of interest required control in special cases and that the legal rate should be one that is above the natural rate. Mr. Dent, the Collector of Masulipatam, wrote: "Where it has been found expedient to fix the rate of interest by legal enactments, the best writers on the subject have given their opinion that this rate should be something above rather than below the market rate.[10] In this zillah, I believe, 12 per cent is rather below than above market price and whilst this continues, I cannot anticipate any advantage from a reduction in the legal rate."[11] "If the principle of Dr. Adam Smith, therefore, is

8 From the Collector of Tanjore, *op. cit.*

9 From the Collector of Tinnevelly, 21-11-1827; In Cons. 3-12-1827.

10 Cf. 'This rate ought always to be somewhat above the lowest market price, *Wealth of Nations*, I. 2. iv.

11 From the Collector of Masulipatam, 3-11-1827; In Cons. 10-12-1827.

correct," wrote Mr. John Orr, the Collector of Guntoor, "that the legal rate of interest should always be fixed a little above the lowest market rate, there appears to be no occasion at least in this part of the country for any reduction in the legal rate."[13] Mr. Kindersely, emphasising the theory that 'interest is the price paid for the use of money,' proceeded to state: "To determine the rate of interest by law, is, of course, only to fix the maximum, which in order to avoid cramping the dealings of the most respectable persons, should always be considerably higher than the usual or average rate of interest. If the legal rate approach too near the average rate, frequent transgressions of it, or the stagnation of trade, must be the consequence. If it be very much above the average rate it is a dead letter. In the one case, the fair trader is compelled to a breach of the law; in the other, the spendthrift may ruin himself without transgress-receive."[18]

Evasion.

Interference in the matter of rate of interest was opposed on other grounds also. Legal restriction would remain a dead letter. There would be no end to the means by which the money-lenders could evade legal regulations. This contention was substantiated by the fact that such regulations enacted before had always been evaded. "I am convinced," wrote Mr. Kindersely, "it would never be conformed to and it would have the effect, if rigidly enforced, of increasing rather than diminishing the rate of interest since the borrower would have to pay the lender for the risk he runs as well as the use of his money."[14] In Coimbatore evasion of law was successfully practised. When money was lent at rates higher than the legal rate of interest the difference was entered in the body of the bond as part of the principal and the interest was made payable on both at 12 per cent.[15] In the District of Madura it was the practice for the moneylender to take a bond for the principal amount at 12 per cent per annum "which was to make it valid in the courts and separate engagements for the differences of $1\frac{1}{2}$ per cent per

12 From the Collector of Tinnevelly, *op. cit.*

13 From the Collector of Guntoor, 28-11-1827; In Cons. 6-12-1827.

14 From the Collector of Tinnevelly, *op. cit.*

15 From the Collector of Coimbatore, 27-11-1827; In Cons. 6-12-1827.

month."[16] This practice of evading the law seemed to have been widely prevalent. It led Mr. Gardiner, the Collector of Vizagapatam, who had every sympathy for the debtor, to agree to a policy of non-interference. "I consider it *very desirable* to lower the rate of interest if possible; but feel satisfied that any enactment for that purpose would be evaded . . . . This practice exists at present amongst the natives and would be carried to a much greater extent, I apprehend, if the legal rate of interest was lowered."[17] And the Collector of Chingleput was apprehensive that control of interest rates might "compel borrowers to resort to the expedient of discounting or exacting receipts in favour of debtors for larger sums of money than they receive."[18]

Instances of the evasion of law were cited by almost every Collector. Mr. Nelson recorded a curious incident in which the Company's Government itself had unwittingly, though indirectly, landed itself in an anomalous position. In 1802, when the wants of Government were pressing, a loan was opened and subscriptions invited at a discount of 3 per cent with an offer of 10 per cent interest, for one year. But in that very year, the law regulating the rate of interest at 12 per cent had been passed, although their own terms of agreement had virtually secured the lender 13 per cent per annum for the first year. It is not certain whether this was noticed at the time, but as no one doubted the faith of the borrowing party, money was advanced without scruple. "If only any of the bonds of this loan had become the subject of contention in the Adawlut Courts, where instruments bearing greater interest than 12 per cent were not valid or recoverable, such bonds or loan obligations would have been considered as waste paper; and the person who might unjustly detain such a document from its proper owner, or refuse to pay the price of it when purchased and received, would have been placed beyond the reach of the law. A suit instituted to determine the proprietary right of one of these bonds for Rs. 1,000 could not be maintained under that plea; and it could only be deemed as a particular piece of blank paper, bearing a certain signature; and this although worth Rs. 1,000 to the holder, its legal or cognizable value would be nothing."[19]

16 From the Collector of Madura, 21-11-1827; In Cons. 29-11-1827.

17 From the Collector of Vizagapatam, 25-11-1827; In Cons. 6-12-1827.

18 From the Collector of Chingleput, 21-11-1827; In Cons. 26-11-1827.

19 From the Collector of Tanjore, *op. cit.*

Revenue Collection.

Practical minded officers also opposed it from the necessities of the situation. Mr. Sullivan, the Collector of Coimbatore, reported that there was a general disinclination all over the country to the proposal to diminish the legal rate of interest and in his opinion the result of such a measure would be to make money dearer than it was.[20] Mr. Kindersely was also alive to this danger of money becoming dear and to its repercussions on revenue collections. It was apprehended that even ryots who could pay would be tempted to postpone payment in order to reap the benefit of higher interest obtainable in the market. This would clog the wheels of rural credit and affect the collections.[21]

Views of the Board of Revenue.

These were the main grounds on which State regulation of the rate of interest was opposed by the Madras civilians of the Company's days. On a review of their reports, the Board of Revenue decided not to further reduce the interest rate at that juncture; but they certainly would not accept the *laissez faire* principles repeated by their Collectors. The Board, consisting as it does of the oldest members of the civil service, usually representing a generation anterior to many of the Collectors in the districts, wisely stated that applications of theoretical principles must be made with great caution and must be modified to the peculiar conditions of the country.

They admitted that there was much force in Mr. Harris' reasonings on this subject; but were not prepared to go as far as Mr. Harris in removing all restrictions on interest. Expediency would not permit them to do it. Further, according to them, arguments adduced by Mr. Harris in favour of it were not founded on any special consideration arising out of the state of this country. They were based on mere general considerations, and they sought to " establish a general (universal) rule equally applicable to all nations and all conditions of society that the rates of interest on money ought to be left entirely free and unrestricted, with no limit even to the rate, which, if agreed to by the parties, may afterwards be enforced by means of proceedings at law." This was, in their opinion, a very disputed question of vast importance which concerned not only the Government of Madras,

20 From the Collector of Coimbatore, 27-11-1827; In Cons. 6-12-1827.

21 General Report of the Board of Revenue, 1835, p. 489.

but the Governments of all countries. It had, then, been much discussed in Europe. The proposal to legislate upon the view advocated by Mr. Harris had been made in Parliament a few years previously, but had not been accepted even there. England had not thought of going as far as Mr. Harris wanted India to go.

A new Bill, which, according to the Board's information, was brought before the previous Parliament, seemed to have aimed at nothing more than making the same change in the law of Great Britain, which was made in India in 1825. The question regarding the expediency of going further and removing all limitation of the rate of interest recoverable by proceedings at law was, in the opinion of the Board, one of great difficulty; and it appeared to them that to await the result of further discussion on it in England would be a wiser course than to introduce in India so great an innovation on mere theoretical grounds.

The Board, therefore, were not prepared to reopen the general question of the regulation of interest. But they were willing to consider it from a practical and immediate point of view. They vehemently attacked the theoretical position assumed by Collectors in general and by Mr. Harris in particular. They said that his assumption that the market rates of interest were regulated by the rates of profit was applicable only where money was borrowed extensively and on long-term contract for commercial purposes. But in India, it was frequently borrowed for personal consumption, and even when men borrowed for productive purposes on short terms, they paid rates of interest much higher than the returns which they could make on the capital they employed. To put the matter in the Board's own language, "The connection between the rates of profit and of interest is, nowhere, very strict; and in this country, it is particularly weak and loose if in practice, it exists really here at all. This appears to the Board to be abundantly proved by the statements contained in the letters now before them. They are fully persuaded that the very high rates of interest mentioned by Mr. Harris as prevailing in Cuddappah and by other Collectors as prevailing in their districts are no evidence of high commercial or agricultural profits. Indeed they strongly doubt whether the average rate of profit in our territories is as high as what is termed the legal rate of interest, *viz.*, 12 per cent."[22]

[22] General Report of the Board of Revenue, 1830.

Subsequent Legislation.

The Regulation of 1825 remained in force till 1855 with minor changes in the intervening period. In 1832, its scope was extended to suits before military tribunals.[23] Section 32 of that Regulation laid down that officers of military tribunals were not to decree interest above 12 per cent per annum even where more might have been stipulated, nor interest to an amount exceeding the principal, nor compound interest. An All-India Act of 1839[24] passed by the Governor-General-in-Council sought to extend the provisions of the Statutes III & IV William IV, Chapter 42, Section 28 concerning the payment of interest to the territories under the Government of the East India Company. It enacted that interest "not exceeding the current rate of interest" might be allowed to creditors by courts from the date on which a debt became due in cases of sums payable by virtue of some written instruments, and from the date of written demand for interest payment in other cases. Act XI of 1841 superseded the provision of Section 32 of 1832 regarding suits before military tribunals and Section 9 of the Act laid down that the military Courts of Requests could allow the interest for money agreed on between the parties, provided the same did not exceed "the usage of the country in ordinary money transactions." Similar regulations restricting the rate of interest were on the statute book in the presidencies of Bengal and Bombay as well.[25]

In 1854, public opinion, shaped by the incessant teaching of *laissez faire* economists, had so far swerved round in England that an Act was passed repealing all the usurious acts on the statute book since 1545.[26] Following it a similar enactment was passed in the next year in India also. Act XXVIII of 1855 repealed Sections 30 of 13 G. c. 63 and all the usury laws in force with the regulations above-mentioned. It was enacted that courts were to decree agreed rates of interest and if no agreement existed, what they deemed reasonable. The decade witnessed the repeal of the usury laws in many countries of the Continent. In Denmark they were repealed in 1855; in Spain in 1856; in Sardinia, Holland, Norway and Geneva in 1857.

23 Regulation VII of 1832.

24 Act XXIII of 1839.

25 Regulation XIV of 1793; XXXIV of 1803; VIII of 1805; XVII of 1806 of Bengal & V of 1827 of Bombay.

26 For the list of them see the schedule to 17 and 18 Vict. c. 90.

UNEMPLOYMENT ASSURANCE IN INDIA

BY

D. G. KARVE.

Unemployment in India.

In every community affected by the fluctuating and world-wide forces of industrialism unemployment has appeared as a vital economic problem. All the communities so affected have recognised that the responsibility for alleviating distress caused by industrial unemployment must at least in part be borne by the society as a whole. The time has gone by when it could be said that there is no industrial unemployment in India.[1] With every further advance of industrialisation in India the phenomenon of genuine unemployment is becoming more and more frequent. The course of the recent depression witnessed many suspensions and contractions of work, causing serious unemployment among workers in all branches of national industry.

Unemployment among educated classes.

Indian labour and its friends have now become vocal and in a general way the topic of Indian unemployment has latterly attracted a good deal of attention in the country. It is, however, no exaggeration to say that unemployment among the educated middle classes, and the seasonal idleness of the agricultural population have evoked much more interest than the wider question of industrial unemployment. It is encouraging to find that public opinion is on the whole favourable to the view that it is the duty of the community to do everything possible to relieve distress caused by enforced idleness without weakening the sense of individual responsibility and without placing unbearable burden on the industries of the nation.

1 " The tendency of the factory worker to return to his village when he fails to secure employment prevents the growth of any large reserve of unemployed workers in the city; but the man who returns to his village is not assured of employment there, or at any rate of regular employment. It is, however, obvious that, as soon as the supply of labour becomes equal to the demand, the problem of unemployment begins to appear and there is no doubt that within the last few years genuine unemployment has made its appearance in some centres and industries." Report of the Royal Commission of Labour in India, 1931, pp. 32-33.

The problem of unemployment among the educated classes is at present being tackled mostly from the educational end, though employment agencies have also been started in a few provinces. In so far as education is a preparation for any profession both the quality and numbers of the educated must be strictly regulated by reference to the prospects of employment. But howsoever well organised an educational system may be it will not be able to prevent unemployment caused by far-reaching industrial factors. The problem of unemployment, therefore, must be treated as being always a likely, though an unwelcome, visitor and economic policy must be so adjusted as to alleviate and, if possible, to prevent the evil.

Seasonal unemployment: (i) In agriculture.

Unemployment is enforced idleness, but so long as the periods of employment are sufficiently prolonged and profitable to enable the worker to earn enough for his maintenance through both the busy and the idle periods, unemployment does not become a vital problem. There is seasonal unemployment in many trades in which the supply and demand conditions happen to be particularly uneven. The Indian agricultural industry is, however, in a peculiar position. That the Indian cultivator is not able to earn in the busy half-year enough for his maintenance throughout the whole year is an evil not primarily of unemployment but of a comparatively backward and unproductive economy. Either by providing the agriculturist with a longer and more productive employment in farming and allied pursuits, as the Royal Commission on Agriculture[2] suggested, or by developing subsidiary industries in rural areas as a certain section of public opinion is aiming to do, or by following both these remedies, the agricultural population can be enabled to live a less precarious existence than at present.

(ii) Among artisans.

The nature of demand for the services of many artisans and industrial workers is such as to cause acute distress over prolonged periods of unemployment. Workers in the building industry or labour employed in several transport services is subject to this form of disturbance. Given ordinary foresight the workers concerned ought to be able to lay by during busy weeks enough to take them through the idle days. The system of advances and

2 Report of the Royal Commission on Agriculture, p. 575.

loans to artisans and industrial workers that prevails on a large scale shows, however, that sufficient thrift is not practised. A system of co-operative insurance, preferably through labour associations, is well worth a trial in this field.

Normal Unemployment: (i) In agriculture.

Seasonal unemployment affects only a few occupations. But modern production is so constituted as to create a normal condition of unemployment in industry as a whole. The 'labour reserve' is composed at any given time by those who have left one employment and have not yet been absorbed by another. In an expansive, or at least a comparatively vigorous, economy the proportion of this reserve to the total labour force is small; and at any rate no particular individuals suffer for a long time. The generally overstocked condition of agriculture in India causes the proportion of the unemployed reserve to be much higher in our rural areas than it ought to be. The prospects of industrial expansion in India are not, for the immediate future, so bright as to justify the hope that the surplus labour in agriculture will be naturally absorbed by non-agricultural pursuits. Conditions of penury, amounting to starvation, are witnessed in many parts of rural India. Private charity and the old bond of village neighbourhood no longer constitute adequate protection against indigence caused by unemployment. Even begging has ceased to be a 'self-supporting' occupation. Though the difficulties, administrative and economic, are great, it is time that suitable methods of introducing poor relief are carefully investigated.

(ii) In industry.

Conditions of employment in our industrial centres may be fairly described as those of continued excess of labour supply. The Bombay Labour Gazette gives monthly information about the employment situation in certain industries in the province. Excepting periods of industrial disputes the information supplied is of the 'rubber stamp' variety. 'Adequate,' 'equal to the demand,' 'no shortage of labour,' are descriptions which for years together have served to describe the condition of the labour supply in important factory towns. The official habit of getting into a stereotyped phraseology while preparing periodical reports is partially responsible for the almost unbroken record of glut in the labour market. Equally true is the charge that the system of recruitment through jobbers that prevails in some of the industries tends to produce an exceptionally large reserve of

labour. But even when the influence of these factors is eliminated the fact of a continued overstocking emerges unchallenged. That industry is not expanding as fast as is necessary to absorb the surplus labour sent out by agriculture is a conclusion that is firmly based on observation and record.

Employment Exchanges.

The normal unemployment which is inevitable in all industrial centres in the world is rendered specially voluminous and prolonged in India on account of the absolute shortage of employment. Besides such far-reaching remedies as an enlightened population policy and an intensive industrialisation, the case for instituting some recognised agencies for employment appears to be very strong. The Royal Commission on Indian Labour[3] felt that inasmuch as the supply of industrial labour is so great as to enable every factory owner to get all the labour he needs almost at his gates, a public employment agency is for the present out of the question. From the premiss of a chronic plenty of labour it is possible to deduce just the opposite conclusion. Add to the plentiful labour supply, the self interest of the jobber, and the uninviting state of rural economy: what then is left but to acquiesce in a regime of unchecked exploitation and unrelieved misery. The crucial question is, is public opinion, now alive to the implications of the situation, prepared to acquiesce in the status quo. If it is not, at any rate for the bigger centres and major industries a regulated labour market is an urgent need.

Subsidised Union Funds.

A labour agency or exchange will not create employment, but it will regulate the flow of workers into industry in such a way as to reduce to the minimum what is called the ratio of normal unemployment. If the employment agencies have branches or authorised representatives in the main recruiting areas, the steadying effect of their action will be all the greater. With normal employment thus regularised and unemployment reduced to a minimum the most satisfactory method to relieve it must be discovered. In the essentially commercial and predominantly shifting population of industrial towns it is futile to expect private charity to relieve any considerable part of the distress caused by unemployment, even if we were to ignore the demoralis-

3 P 35 (*Ibid*).

ing effect that such a haphazard provision would have on its recipients. The best provision for the relief of normal unemployment can be made by instituting a system of subsidised union funds for that purpose. It is true that a very small fraction of factory labour is at present included among members of trade unions, and virtually none of these latter make any provision for unemployment benefit. If, however, a scheme is adopted whereby approved benefit funds, by which should be meant unemployment benefit arrangements made by registered trade unions under rules approved of by the local governments, are subsidised by the employers, a strong impetus will be given to trade union organisation. The direct and indirect advantage of such a development will be immense. It is very encouraging to find that a large number of labour witnesses assured the Labour Commission that the workers would be prepared to contribute to a well costructed scheme of unemployment benefit. If a proper lead is forthcoming from the state the employers also can be persuaded to bear their due share.

Poor Relief.

Distress which goes unrelieved by any such scheme, either because the person concerned is not a member of a recognised labour association or because the limit of benefit received from the latter has been passed, ought to be the concern of a system of poor relief. As stated above with reference to distress in rural areas, though the difficulties in the way of its formulation and execution are very great, the introduction in some form of a system of organised poor relief must no longer be delayed. The old social and religious ties no longer avail to the necessary extent to relieve indigence. Economic and political progress is being achieved at the cost of much that had a compensating and insuring influence in the old institutions. New methods of group compensation and insurance must, therefore, be devised. Fortunately the spirit of charity is as strong among all classes of Indians as it ever was. What is needed is a social organisation that will mobilise individual charity for a collective purpose. A poor relief fund should be started by each local body and contributions, earmarked and other, should be received for it. The local authorities cannot, of course, afford to depend upon voluntary contributions to enable them to discharge their statutory obligations. For this purpose they must find resources out of their present or prospective sources of income. The scheme of poor relief, both in its administrative and financial implications, will have to be so framed as not to dull the edge either of

individual responsibility or charity. The experience of other countries will in this respect be very helpful and with the best of systems some wastage might result. What, however, can no longer be justifiable is to ignore the existence of unrelieved distress almost chronically caused by unemployment and to resist the adoption of carefully worked out schemes, because they are likely to produce some evils.

Technological unemployment.

The contributions to be made by employers towards the approved unemployment benefits of unions will have to be determined by local inquiry, and these might conceivably vary from province to province and from industry to industry. But in the case of unemployment caused by technological reorganisation or by large scale schemes of rationalisation the employers have a special responsibility, as the Fawcett committee had recommended in regard to the Bombay Textile Industry. In such cases the employers must contribute liberally towards compensating the employees for their loss of employment.

Unemployment caused by fluctuations, cycles and crises.

Besides the seasonal and normal forms of unemployment many of the economic disturbances *e.g.*, crises and trade cycles, are producing an increasing amount of enforced and distressful unemployment in India. The isolated character of India's local and national economy is breaking down. The recent world depression produced extensive economic distress in the country. It will not do any longer to assume that the comparatively self-sufficient and 'subsistence' nature of Indian economy renders a special provision for cyclical and mass unemployment unnecessary.[4] For one thing, the growth of organised industry and the development of means of communication are creating business conditions of a dynamic and competitive nature. These are bound to produce fluctuations in the demand for labour. Transport, building and textiles are industries in which such fluctuations have been frequently witnessed. With growing industrialisation the susceptibility of Indian economy to the normal evils of a capitalistic structure of production is increasing. If a policy of planned control of industry is followed from the very initial stages of industrialisation the alternation of periods

4 Evidence of Bombay Chamber of Commerce before Royal Commission on Indian Labour. Vol. I Part 1 p. 425.

of unemployment and of good demand for labour will be reduced to a minimum. But some periodical unemployment is bound to arise and a definite provision for its relief has got to be made. The need for such provision has now become all the greater on account of the increasingly closer contacts between world economy and India. Relief of distress caused by unemployment of this sort is beyond the capacity of unaided and unorganised individual effort.

Famine Relief during periods of economic dislocation.

There is always a systematic and on the whole a satisfactory provision for the relief of agricultural unemployment caused by famines. Areas which are liable at frequent intervals to suffer from drought, floods, locust raids or any other visitations of nature are continuously watched throughout the critical periods. Financial and administrative provision has been made to enable the people concerned to tide over the difficult period with as little suffering as possible. Dislocation caused in agricultural economy as a result of a worldwide depression or by any other industrial cause must now be almost as normally expected as nature's visitations. It is true that distress caused by the failure of human organisation might be rendered less frequent by perfecting that organisation and by guiding it properly through the critical period. Timely advice to agricultural producers as regards the prospects of several crops, the adjustment of credit and marketing organisation and an easing of revenue demand will go a long way in making the transitional distress of unemployment as bearable as possible. The state cannot, however, ignore its responsibility of guidance and relief, by such measures as initiating public works, in this new form of widespread distress caused by economic factors. The active policies of agricultural relief and rehabilitation followed by most countries in the recent period of depression contrast against the almost perfect passivity of Indian authorities.

Plight of unorganised workers.

In a transitional economy like our present one the disorganised and manual workers in industry are constantly susceptible to what in effect might be termed technological unemployment. Competition from more efficient internal and foreign sources is even now throwing out of employment a large number of artisans. The process of their absorption in other occupations is very slow and uncertain. In periods of acute

depression the lot of these workers in unorganised industries is even worse than that of their confreres in organised industries. Both the chronic and acute stages of unemployment among the artisan classes indicate the need of some provision for poor relief. The local bodies must be responsible for this service, and their normal resources ought to be strengthened so as to enable them to discharge this responsibility. In exceptional cases, the provincial governments might be called upon to augment the resources of local bodies.

Genuine industrial unemployment: prospects of insurance.

Both on account of their competitive and capitalistic structure the large-scale organised industries in India are most directly affected by economic fluctuations, crises and depressions. A class of workers which is almost exclusively dependent on factory employment is growing in India. The mere fact that in some centres the labourers occasionally visit their native villages, to which they also resort in times of prolonged unemployment, is not a sound basis for the opinion that the problem of industrial unemployment does not exist in India. Workers leave villages in the first instance because they have no remunerative employment there, and they leave the towns when the latter cease to offer them work. The unemployed among industrial workers do not cease to be unemployed simply because they return to the villages. The migratory and unorganised state of Indian labour does indeed constitute a formidable administrative and technical difficulty in the way of framing any satisfactory scheme of unemployment insurance on a wide scale. As, however, the institution of regular periods of leave, which the workers may utilise to visit their homes, gains deeper root and as a larger number of workers comes to depend on industrial employment the administrative and actuarial difficulties will decrease. Even now for some industrial centres and for some industries, *e.g.*, the textile, railway, iron and steel, a detailed investigation into the possibilities of introducing a scheme of unemployment insurance is overdue.

Famine insurance and industrial unemployment.

In the meanwhile for all organised industries immediate steps at relief of periodic unemployment must be taken along the following lines. As stated above a poor-law and a scheme of subsidies to union funds must be immediately introduced. Casual cases of individual distress will be covered by the poor-

relief scheme. Unemployment caused by economic factors affecting small groups or extending over short periods can be relieved by subsidised union funds. Mass unemployment by whatever factor caused must be definitely considered as a charge on the provincial government. The provincial governments have schemes for famine relief which have developed along lines indicated by administrative and financial experience gained in the past. Similar experience in the industrial field will no doubt shape the actual details of unemployment relief schemes in the future. These may vary from province to province. The provincial governments should take immediate steps to make regular financial provision for unemployment relief. The unused grants of each year should be carried to a fund like the famine relief fund, which should for the present grow indefinitely. Schemes of public work, not necessarily confined to the industrial towns, should always be ready and it should be the duty of the labour office in co-operation with the executive authorities to initiate these along lines now familiarised by the Famine Relief Code. This is a line of sound progress and experience gained in following it might be utilised to shape future policy, as might suit the special conditions of industrial towns in India.

Conclusion.

As the heading of the paper suggests the persons affected by 'unemployment' distress must in the first instance be assured of at least a bare relief. The poverty of India as a whole and the administrative and technical difficulties in the way cannot and ought not to be considered as justification for a policy of doing nothing to relieve the frequent and widespread privations caused by unemployment. Organised poor-relief, subsidised union funds and relief of industrial unemployment along lines of famine relief must be immediately introduced. The introduction of these measures is bound to entail some sacrifice on the part of the less unfortunate sections of the community. The changing course of our economic and social life, however, necessitates and justifies timely public action, so that more critical and baneful developments of the future might be forestalled.

Thanks to the gathering forces of political and social reform in the country, it might be hoped that practical action along these lines will be initiated without further loss of time in at least a few of the so called industrial provinces.

UNEMPLOYMENT IN INDIA

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A community may treat its criminals or its lunatics unwisely without more than local inconveniences; it will touch, in any case, but an insignificant percentage of its members. It cannot treat of the question of employment unwisely without the risk of grave harm to it in every quarter; its policy there is a policy affecting the great majority of its citizens. BEVERIDGE.

Unemployment lies at the root of many social evils in a country. An unemployed man is a hungry man. A hungry man is an angry man. He joins an army of the discontented, an army of radicals. Statesmen lecture to the masses upon the wickedness of radicalism without understanding that the evils of which they complain are not due to the wilful greed of labour but to causes which might have been local, national or international in character, or possibly of their own making, due to certain policies with regard to currency and credit which have brought about a reaction. Leaving aside the causes, the term "unemployment" itself is often not a well-defined conception for many of them and needs elucidation.

Unemployment may be defined as 'enforced idleness' for the wage-earners of a country (the term wage-earner to be understood from the point of view of efficiency for the work to be undertaken at current rates of wages and not only the desire for it) due to a maladjustment between the demand for, and the supply of, labour. This maladjustment may exist as a 'state' or as a 'tendency.' When it exists as a state it is the difference between the wage-earning population and the number of persons employed. When viewed as a tendency, the difference between the wage-earning population and the number of persons employed should be understood as an "idle reserve," standing against changes in demand for labour, and expanding or contracting

according to the nature and extent of these changes which might be the result of various factors, except, of course, in the occupations where the method of engaging labour is the permanent-staff-method and the demand function is limited to a number of posts available which is more or less fixed as in Government Services, and vacancies occur only at retirement, death or dismissal. In such occupations, once the candidates are rejected either as the result of competitive examinations, or for age, they cannot have as "outsiders" an equal chance with the "insiders" for employment in that occupation and must be driven to seek work elsewhere.

The variations in demand might be the result of seasonal fluctuations as in the case of agricultural industry in India or they might be the result of 'cycle fluctuations' due to a complex of causes acting and reacting on one another; or to a general rise in demand due to certain "state expansionist" policies. Again, when wage-rates are lacking in plasticity, other things remaining the same, some amount of unemployment is bound to occur. If there is a tendency for the wage-rates to become rigid at a point that is too high in relation to production per head of the population, part of the population will not be able to find employment at wages.

The difference between the wage-earning population and the number of persons employed will fluctuate according to the nature and amplitude of the fluctuations referred to above. On occasions a stream of workers might be thrown out to add to this "idle reserve," or at other times due to the expanding trade or business of the country or the "state expansionist" policies, a part of this reserve might be absorbed in employment.

There is no single-cause theory to explain these fluctuations and consequently unemployment. Again, as Prof. Pigou remarks, the unemployment that exists at any time is not the summed effect of a number of causes acting independently; it arises because a number of causes are balanced against one another in a particular way. "To speak of one of these factors as the cause, or even as a cause, is arbitrary, for that factor might remain as it is and yet the relevant part of unemployment disappears, provided the state of one or more of the others was modified. When a ship is too low in water, the effect is a combined result of the weight of the cargo and of the ship. If the capacity of the ship is taken as given, the excess weight of the cargo is called the cause; but if the weight of the cargo is taken as given, the inadequate capacity of the ship is called the cause. In fact, neither of these things taken by itself is the cause but the maladjustment between

them. The evil will be cured if the maladjustment is removed either by decreasing the cargo in sufficient measure or by enlarging the ship in sufficient measure, or by decreasing the cargo and enlarging the ship in such measures that adjustment between them is attained."

The forces which make for adjustment in the labour market get to work very slowly and seldom complete their work. For example, during the Great War of 1914, firstly, due to a lower birth rate and heavy casualties during the War, the wage-earning population of the country was decreasing, and secondly, due to the rise in demand for labour in army quarters and the various industries of War importance and other factors, the employment was increasing, still a complete adjustment was never attained and some measure of unemployment did exist. A certain normal minimum of unemployment is characteristic of modern industry and must persist even during times of prosperity. The unemployment statistics collected by the League of Nations go to show that even during the war period, in spite of the factors referred to above, an intractable minimum of unemployment did continue. The war-period average of unemployment figures works out to be 0·6 per cent for the United Kingdom and 1·9 per cent for Germany. In the United States 5 per cent of the labour supply is unemployed under conditions of prosperity. Taking the average of good and bad years probably 10 per cent of labour is constantly out of work. It will thus appear that a complete adjustment between the demand for, and the supply of, labour will be an accident and an accident which will rather be rare.

The information about fluctuations in the volume of unemployment is obtainable in western industrial countries in a variety of ways but no authoritative data are available to determine precisely the actual number of unemployed even there. The statistics available lack both in comprehensiveness and scientific accuracy. For example, the returns from employers, which are chiefly developed in the United States, show the number of persons employed at different dates by representative establishments and thus indirectly the state of unemployment. The biggest employers, however, make these returns and the countless number of small workers, who in the mass would have a considerable effect on the figures, are usually unrepresented. The employment exchanges, which exist in many countries, bring the work and the worker together. They show the number of applications for work and workers classified by industries and occupations. A large number of vacancies are, however, filled

directly without the help of the exchanges, and thus the statistics cannot be considered as comprehensive for constructing an index of unemployment. The figures supplied by the workers organisations, that is the trade-unions which pay unemployment benefits, form the basis of another type of statistics. These statistics are not representative of all the trades because the unskilled and the less skilled are often not organised at all. The unemployment insurance returns, which show the number of workers drawing out-of-work benefit, are by far the best type of statistics. The chief merit of unemployment insurance is that there is some financial inducement for the unemployed worker to declare himself and the payment of benefit depends on some test as to the genuineness of unemployment. Here also the figures cannot be truly indicative of the volume of unemployment. When workmen have exhausted their right to benefit or when the benefits have been reduced or withdrawn, according to the regulations in force, there will be a tendency for the figures to decline although unemployment itself may not have decreased.

Such are then the difficulties in arriving at a correct index of unemployment in the case of the western countries. In the case of India, however, the conditions are still more peculiar to admit of a scientific treatment of the subject. In a country where 73 per cent of the entire population live on agriculture carried on under primitive methods of production, and industries (including cottage industries) absorb only 9·97 per cent of the population, where trade-unionism is not very much developed, where there are no schemes of unemployment insurance or labour exchanges, where the wage-rates in the different occupations are diffused amongst the community of workers in a way that there is no "humanitarian minimum," the discussion of the problem of unemployment from a scientific point of view would be rather premature.

One doubts very much, in the absence of statistics, if an unemployment problem at all exists in this country, except in the case of the educated middle class about whom also no statistics are available in spite of the attempts of the various provincial committees which sat from time to time. An attempt was made to obtain the figures of the educated unemployed by the census authorities of 1931 and a separate schedule was prepared to be filled in by the enumerated himself and not by the enumerator. The instructions on the form, as the Census Commissioner reports, stated that the information was required in the interest of the public, of the state and of the unemployed themselves, and it might have been anticipated that a general

response would have been made to this effort to obtain information. The attempt was, however, a failure. The various objections raised by the enumerated were that the information was needed in connection with the terrorist activities or perhaps for the income-tax assessment. Another objection which came to be heard was that when Government was not going to give them employment why should they be called upon to fill in these returns. Coming to the various occupations and industries the same sort of practical difficulties have to be faced, inspite of the fact, that some of them claim to be organised. The writer of this paper made enquiries to get at actual figures of unemployment in the occupations organised through trade-unions, and the records of the Calcutta Dockers' Union, a fairly organised body, go to show that no satisfactory figures of unemployment could be available. There are 14,000 workers working in fourteen different lines, but the total number of members on the register of the trade-union is 2,200, out of which only 800 men pay a subscription of -/4/- per month. Unemployment relief is given in certain cases but it varies between -/2/- to -/4/- per day and there is no special contribution from members towards this relief-fund. There is no definite term for which the benefit continues and then the benefit is not given in the case of all the unemployed. Recently the number of unemployed in B.I.S.N. was 300 out of two thousand workers under 140 Sardars, but only 50 out of the number of 300 were getting unemployment benefit. As will appear, the figures are neither comprehensive nor conclusive for the whole body of workers to arrive at any definite conclusion, and such is more or less the state of affairs with every trade-union. In the case of agricultural industry there is a surplus to the needs of demand for labour for employment but much of this surplus, thanks to the domestic and social system of the country, particularly to the laws of inheritance leading to sub-divided holdings, is absorbed in some sort of work connected with cultivation at their small holdings while their low standard of living helps to sustain them. Unemployment as a definite phenomenon occurs due to conditions of weather or scarcity or excess of rains.

An analysis of the figures obtainable in the western countries goes to show that to construct a precisely correct index of unemployment for those countries would be rather difficult. Even if such a figure could be revealed to an economist in his dream at night then on his waking up the next morning he should be at least sure of one thing and that would be that the figure had changed. There must have been some retirement, death or

dismissal somewhere creating an unfilled vacancy or some minor fluctuation creating a variation of demand leading to a slight change in employment or unemployment figures. The conclusions, therefore, should be considered as general approximations which must be the characteristic of a science which 'studies man in the ordinary business of life,' indicating constant change.

In India no statistics are available and the problem has got its own characteristic difficulties. The only possible method of approach, therefore, to arrive at an approximate volume of unemployment existing as a 'state' can be to determine the wage-earning population of the country and to deduct from it the number of persons employed in the various industries and occupations. This method will be in conformity with the conception of unemployment with which we started and which has the sanction of standard writers like Prof. Pigou who says, "The number of people unemployed at any time is equal to the number of people who desire employment—the would-be wage-earners—minus the number of people employed."

The word 'desirability' for employment is to be interpreted in terms of efficiency for the work to be undertaken, *i.e.*, the state of the worker's health, his mental, physical and general technical equipment, his age and his effective desire to be employed at current rates of wages in an establishment not engaged in an industrial dispute. To arrive at the wage-earning population of this country, we have deducted from the total population two classes of persons, firstly those who are 'unemployable' and secondly those who do not desire to be employed and live a life of voluntary idleness. The first category of persons would include—

(1) people who on account of various physical and mental infirmities are unable to do any sort of work;

(2) children below, and men above, certain ages who cannot contribute to the wage-earning section of the population;

and the second category would include those persons who on account of social usages and customs would not like to come out for any wage-earning concern, *i.e.*,

(1) women in purdah and

(2) big zemindars and members of aristocratic families who depend on their own income and live a life of voluntary idleness.

The total population of India according to the census of 1931, is 352,837,778 and the number of people suffering from various infirmities is 1,095,678 giving a residue of 351,742,100 as the able-bodied section of the population. For this able-bodied section of the population, the number of females in purdah works out to be 17,895,333 and deducting this figure from 351,742,100 we get 333,846,767 as the 'would-be' wage-earners irrespective of age. The age-group of the wage-earning population has been assumed to be between 15—50 and this age-group is 50·5 per cent of the population, 50·5 per cent of 333,846,767 is 168,592,617 and it might be taken as the total wage-earning population of India of working age, *i.e.*, out of a total of 10,000 persons, 4,778 are 'would-be' wage-earners and the actual number of wage-earners per 10,000 according to the census of 1931 is 4,391 giving a difference of 387 as unemployed for every 4,778 persons of the population who would desire to be employed. The percentage of unemployment on this basis works out to be 8·1. These conclusions have been arranged in the form of a table given on the next page.

Table showing the percentage of unemployed people of India on the basis of wage-earning population

1	2	3	4	5	6	7	8	9	10	11
Total population of India.	Number of people suffering from various infirmities. (1)*	Able-bodied section of the population.	Total number of females in the able-bodied section of the population 1,000 males 940 females. (2)*	Number of females who would not come out for any wage-earning concern on account of purdah. (3)*	Total number of potential wage-earners irrespective of age.	Total number of actual would-be wage-earners between the age of 15-50. (4)*	Would-be wage-earners per 10,000 of population.	Actual number of wage-earners per 10,000 population. (5)*	Difference between 'would-be' wage-earners and actual wage-earners	Percentage of unemployed on the basis of wage-earning population.
Census of 1931.	Census of 1931.	Deduct column No. 2 from column No. 1	For every 1,940 persons 940 females.	10·5 per cent. of column No. 4	Deduct column No. 5 from column No. 3.	50·5 per cent. of column No. 6.	As calculated per statement	Census of 1931.	For every 4,778 employable persons.	
352,837,778	1,095,678	351,742,100	170,431,739	17,895,333	333,846,767	168,592,617	4,778	4,391	387	8·1 per cent.

*(1) People suffering from various infirmities according to the census of 1931.

Insanity	...	120,304
Deaf Muteness	...	230,895
Blindness	...	601,370
Leprosy	...	147,911
Total	...	1,095,678.

*(2) The average of females to males works out to be 940 for every 1,000 males for all religions.

*(3) The number of females who observe Purdah and would not like to come out for any sort of wage-earning concern has been worked out as follows:—The Urban Section of the female population in India generally observe Purdah and the proportion of Urban to rural population is 11·89 p. c. This figure of 11 p. c. has been further reduced by ·5 p. c. in order to exclude those females who are educated and would like to be wage-earners and 10·5 may be taken to be a fairly correct figure for women in Purdah who would not desire to be employed.

*(4) The distribution of the age-groups of population for India as a whole is as follows:—

0—15 ;	15—50 ;	50 years and over
39·9 p. c. ;	50·5 p. c. ;	9·6 p. c.

The employable age-group of the population has been taken to be between 15—50 which is 50·5 p. c. It is possible that in certain places children a little below 15 might be wage-earners but as the result of a special enquiry made by the census authorities in Baroda only 1 boy out of 62 aged from 10—15 was returned as earner and in other places they were working dependents. The small error on this account will be rectified by the fact that in Government Services and certain other occupation the minimum limit for employment is between 22 and 25. The upper limit of the wage-earning population has been assumed to be 50. This will be really determined by economic conditions due to environment and locality but it may be safely asserted that majority of persons above 50 in this country will be non-working dependents and the small number above 50 who will be in a proper state of health to do active work will not appreciably affect the percentage.

*(5) The number of people employed in all occupations is 4,391 per 10,000 of the population. This figure of 4,391 also includes the big Zemindars living on their own income and hence their number has not been deducted from the total popla-tion. The percentage, therefore, will remain the same.

It might be of some interest to compare this figure with the fluctuations in the volume of unemployment in other countries. The following table has been prepared from the statistics of unemployment collected by the League of Nations. They are based on the trade-union returns. These returns cannot be very comprehensive because possibly they do not include all the occupations—less skilled and not skilled. Again for purposes of international comparison their value might not be very great because of the different definitions of unemployment adopted in different countries. A comparison, however, might be useful in throwing some light on the approximate volume of unemployment. They refer to four countries—the United Kingdom, Germany, Sweden and Australia, for which figures could be available.

Average volume of unemployment in various countries—

Country.	Pre-war average.	War average.	Post-war average.
United Kingdom	3·5%	0·6%	10·3%
Germany	3·5%	1·9%	2·9%
Australia	5·8%	7·1%	8·2%
Sweden	5·3%	6·8%	16·8%

A comparison of the figures with the western industrial countries shows that the figure of unemployment in India is as high as in England and Australia except Germany where it is rather low and Sweden where it is very high. One peculiar difference is that in India the distress due to the unemployment problem does not appear to be so much on the surface as in the case of the western countries.

One of the replies to the questionnaire issued by the Bengal Unemployment Committee of 1925 was as follows:—"I am unable to persuade myself that there is an unemployment problem at all. Unemployment is certainly common among the middle class Bengalis but the unemployed decline to join the working classes and are in fact not dependent upon work for their livelihood. It is common knowledge that workmen are not forthcoming in Bengal in anything like the number required by the industries and transport business of the country, and the middle class Bengalee considers working class employment beneath him. He is fortunate in being able to live to his belief, thanks to the remarkable resources of the agricultural, social

and domestic system that begets and sustains him. I know of no other country outside India where such a large proportion of the community live at a middle level of comfort without doing any work, or where life in general for the whole community is so easily achieved, or where unemployment in the general sense of failure to obtain the means of livelihood on the part of a man who is prepared to take it in any sphere, is so rare: or where the need for a poor law is so definitely absent."

The explanation of the paradox lies in the fact that an industrial population as it exists in the western countries has made very little progress in India and the labourer has not been completely divorced from the soil. He frequently possesses or has an interest in a small plot of land in his village on the cultivation of which he falls back in times of depression. The educated worker generally falls back on his relatives for assistance. The majority of the workers is accustomed to a low standard of living, while the joint family system helps to maintain and sustain them. In India every joint family is an insurance against unemployment.

It cannot be possible to determine exactly the incidence of unemployment in the various occupations. It may, however, be stated categorically, without much margin of error, that a large portion of it is concentrated in the agricultural industry and in the educated middle class. In the agricultural industry much of the labour is in excess of the needs of demand and so is the case with the educated middle class. The entire volume of unemployment, therefore, in this country is not an 'idle reserve' against fluctuations but a good deal of it is a surplus to the needs of demand. When in a country the "disequilibrium between wages and production results from a rise of wages unaccompanied by a rise of production per head then unemployment may be ascribed to excessive wages, when it is due to a fall of production per head unaccompanied by a corresponding fall of wages unemployment may be due to overpopulation." In the case of agricultural industry there has been a tendency for the agricultural holdings to become uneconomically sub-divided and fragmented, the average holding being between 4 to 5 acres and in some cases it is one-fourth of an acre. The Law of Diminishing Returns operates more quickly under such conditions thus proving that proportionately there is more of labour being applied than the proportionate return from land. If the lands were re-arranged on an 'optimum' basis of production then probably half of the labour supply shall have to be displaced. And then another stream of idle workers is thrown to add to this number

on account of seasonal fluctuations in agriculture. On an average an agriculturist is idle for four months in the year. In the case of the educated middle class we find a 'university population' much exceeding the optimum number required for the various administrative or clerical jobs under Government for which they have been trained. The number of jobs being fixed and the demand function of labour for these occupations being only limited to these jobs, any quantity in excess of the needs will only add to the volume of unemployment. And then the tragedy of the whole thing is that an educated worker is a misfit in any sort of commercial, industrial or agricultural work.

The system of education in this country did not grow up from the soil but was superimposed from above to meet the needs of the administration. In introducing the system Lord Macaulay wrote:—"We must at present do our best to form a class of people who will be interpreters between us and the countless millions we govern, a class of persons, Indian in blood and colour but English in taste, in opinions, in morals and in intellect." That purpose was served long ago but the system continued with the result that it has produced an "intellectual proletariat, unemployed or uncongenially or inadequately employed and an intellectual proletariat happens to be the seed-bed of revolutionary movements, political and economic."

An absolute or relative volume of unemployment in the educated middle class has not been attempted so far except the findings of the Sapru Committee whose conclusions are based on the applications submitted for various competitive examinations or for certain clerical jobs under Government. The attempt of the Census authorities in this direction was more or less a failure. They, however, obtained some figures from the education department for the purpose of their report of 1931. The figures showed that there were, in 1930, 25,716 candidates who passed the Matriculation, 13,633 who passed the Intermediate Arts or Science examinations, 9,300 who passed examinations for B.A. and B.Sc. and 1,426 who passed the examination for M.A. or M.Sc.—a total of over 50,000 of whom 10,000 were graduates. Further, according to their calculations, the number of graduates turned out annually from 1921 onwards has not been less than 7,000 and has been twice over 10,000 making over 65,000 graduates alone from 1921 to 1930 apart from those who have failed to graduate. Out of the entire number 15,000 odd were returned as unemployed most of whom were matriculates. There is probably a considerable element of understatement in the figures but the one general conclusion suggested by the figures

is that there is more of unemployment amongst the matriculates, than amongst the highly educated people. Again the figures collected by the same authority about the educated unemployed by degrees lead to the same conclusion, *i.e.*, there is more of unemployment amongst the semi-educated than amongst the highly educated. These figures relate to two provinces and one native state. They cannot be relied upon for giving any definite idea about the volume of unemployment amongst the educated because in many cases the schedules were not filled in and returned. They, however, show a general tendency about the incidence of unemployment amongst the various sections of the educated community by degrees. These figures are reproduced below:—

Educated Unemployed by Degrees

Degree	Total unemployed.	Aged 20-24	Aged 25-29	Aged 30-34	Aged 35-39
1. British Degrees ...	30	4	9	11	6
2. Continental Degrees ...	3	...	2	...	1
3. American Degrees ...	8	2	1	...	5
4. Other Foreign Degrees	5	..	1	1	3
5. Indian Degrees Medical	154	20	68	53	13
Legal	149	14	59	52	24
Agricultural ...	21	15	4	2	...
Commerce ...	111	55	42	8	6
M.A.	113	31	4	28	10
M. Sc.	41	10	18	9	4
B. A.	1,370	708	474	133	55
B. Sc.	169	76	72	19	2
B. Eng. or L.C.E. ...	42	13	20	7	2
B. T. or L.T. ...	35	10	22	3	...
Intermediate ...	284	145	80	37	22
School L. C. or Matric	11,317	7,150	2,092	951	314
Non-Qualified ...	1,457	772	379	193	113
	15,309	8,025	4,197	1,507	508

The general conclusion suggested by these figures is that a greater portion of the unemployed is confined to people who are 'non-qualified' or semi-educated or secondly, who go in merely for Arts degrees and in the case of people who possess foreign qualifications or degrees in technical subjects the volume of unemployment is comparatively much small. This conclusion might be useful in suggesting remedies for unemployment.

The remedies for unemployment may be divided into the following categories:—

(*a*) Those that seek to reduce the number of wage-earners.

(*b*) Those that seek to create more employment.

(*c*) Those that seek to reduce fluctuations.

The first category will include emigration, raising the school age and inducing old men to retire on pensions.

Emigration can be a remedy for unemployment but under existing conditions it cannot be a practical possibility. The laws regarding 'naturalisation' in the various countries and the prohibitive regulations about indentured labour make the discussion of the problem out of the question.

Inter-provincial migration might, however, redistribute the volume of unemployment but will be no remedy for it. It is possible that when allowance has been made for all other factors such as currency dislocations, economic disturbances, etc., a part of the total volume of unemployment might be due to over population when particularly the "short-term plasticity of wage-rates," as Lionel Robbins observes, "is imperfect, it is conceivable that a tendency to diminish real income due to over-population might show itself for a time in an increased volume of unemployment." Emigration being not a practical possibility a lower birth-rate as the result of birth control might help to remove in the long run that part of unemployment which is likely to be due to over-population.

Raising the school-age and inducing old men to retire on pensions will affect the age-composition of the wage-earning population and thus indirectly help to reduce the number of wage-earners and consequently unemployment. The primary standard of education should consist of six years training being imparted mostly in the three 'R's with a practical and vocational training in the methods of cultivation according to the rural and agricultural needs of the country. The age-limit for primary standard should be 12 years and boys should remain at school for six years; the first four classes constituting the lower primary standard and the last two classes constituting the upper primary standard. The minimum age for the Matriculation and school-leaving examinations should be 16 years and for both the examinations there should be a separate curriculum—one preparing the candidates for higher University education and the other for some vocational sort of life. The age for retirement from government service should be reduced from fifty-five

to fifty. This will be desirable both in the interest of economy because men at the top getting maximum pay will be replaced by young men starting their career at the initial salary and secondly, it will help indirectly to reduce the wage-earning population of the country and bring about a better adjustment between the demand for, and the supply of, labour as far as Government services are concerned.

Coming to the remedies for creating more employment, the first suggestion which needs consideration is the state expansionist policies including public works, bounties to private concerns, guarantees of rates of interest, protective duties, etc. Public works and their extension have often been advocated elsewhere and particularly in India as a remedy for unemployment by the various committees. One thing, however, which is usually ignored in the popular discussions of the subject is that the benefit to employment will be a temporary one. The rise of demand will no doubt create more employment for the time being, but the moment the wage-rates adjust themselves to the new demand situation the benefit will be exhausted. A lasting permanent effect on employment might be produced, remarks Prof. Pigou, if the State undertook and succeeded in its undertaking not merely to make the real demand for labour higher than it would otherwise have been, but to make it *progressively higher*. If these devices succeeded in expanding progressively a real demand for labour, the time lag that intervenes between the stimulus and the enforcement of claim to higher wages would enable them to make employment permanently larger than it otherwise might have been. This kind of policy, however, through adverse reactions on the accumulations and retention at home of capital is liable, if pressed beyond a certain point, to defeat its own purpose and has, in fact, as a deliberate policy never been advocated." What is of real significance, therefore, is not their long time but their short time consequences and in times of exceptional depression they can be useful devices to fill up the trough of bad trade.

It may, therefore, be suggested that there should be a small committee in each province working under the Minister of Labour to advise the Government from time to time regarding the incidence of public work schemes. This committee should be in touch with the Public Works Department and according to the advice and suggestions of this standing committee the Public Works Department and the railways should undertake the construction and execution of big schemes only during times of 'depression,' such depressions not being merely the lower

extremity of a trade cycle. Again they should advise the Government in raising loans for the execution of such schemes when money is cheap. It would be on the whole beneficial to finance public works by loans rather than by taxation. To increase taxation in times of depression would only hinder fresh enterprise and transfer labour from private works and thus any beneficial effect on employment will be neutralised. "Where money for which there is no outlet can be borrowed at cheap rates for schemes of national development, the volume and velocity of monetary circulation is increased and as a consequence, the aggregate amount of employment tends to expand." Public works can only be economically effective in combating depression when they are accompanied by an 'expansionist monetary policy' as had also been pointed out by Mr. Butler in his evidence before the Sapru Committee, provided, of course, this can be done without the risk of inflation or weakening credit.

The crux of the middle class unemployment is the Matriculate as has already been stated. With the introduction of the compulsory primary free education throughout India much of the problem of unemployment amongst the matriculates will be solved if facilities are afforded to give them a little training to enable them to take up teaching work in the primary schools. India is a country where 89 per cent of the population live in villages where there are no satisfactory arrangements to impart even primary education to children. With the introduction of compulsory primary education up to Standard VI along model lines as already indicated there will be a demand for the services of teachers to educate at least 25 per cent of the entire population and this demand will be able to absorb almost the entire number of trained matriculates and teachers who are unemployed.

Again in certain provinces the scheme of agricultural colonies has been tried to divert the unemployed educated worker towards farming. These schemes have not been successful in the past and have little promise of being successful in the future in spite of the interest displayed by certain ministers in charge of agriculture in this direction.

An educated worker who has been trained under the present system of education for a particular sort of work will never turn out generally to be a suitable person either to be a colonist or a farmer. The conclusion of the Sapru Committee on this point is conclusive:—"We should not be understood to deprecate any of these schemes, but such evidence as we have recorded and our experience of young men living in and brought up in towns do not encourage us to hope that those of them who have no connec-

tion with land or who do not come from or belong to agricultural families, are likely to avail themselves of any such schemes and settle down on land as practical colonists or farmers."

A scheme to utilise 100 acres of good land with irrigation facilities for establishing a practical training centre for three years in U. P. had not been successful. The scheme, as the official report observes, had not awakened any response on the part of the educated unemployed, or shown that there is any real demand for employment by these, if such employment entails hard work. Even on the part of young men of agricultural classes there seems to be a tendency to flock to cities in search of low-paid employment and so to swell the ranks of the unemployed.

The scheme of agricultural colonies, therefore, is not likely to prove a remedy for unemployment for the educated middle class.

Again granting that such a scheme turns out to be successful the moment it becomes known that the Government will find land for the unemployed I.A's and graduates the temptation for parents to send their sons to colleges would be increased and a time will come when it will be impossible for Government to find more land. It might be possible for sometime to add to the area under cultivation but the demand for the products of land, *i.e.*, raw materials, etc., is limited by the nature and extent of the export trade and business of the country. If the export trade and business do not expand, the result of enhanced productivity will be a lower price-level for the raw materials, affecting rents and there will be a tendency for the marginal lands to go out of cultivation thus leading to unemployment again. It will be only robbing Peter to pay Paul.

Co-operative farming, with supplementary rural industries, under the supervision of the Co-operative Societies with its incidental demand for jobs of an administrative and clerical nature might be better able to solve the problem of unemployment than agricultural colonies.

The co-operative movement as a credit agency has failed to come up to the expectations of the sponsors of the movement. Societies for co-operative farming will be a useful device to get over the difficulty of small holdings which prove a serious obstacle to the improvement of Indian agriculture. These societies will work under the supervision of the Government and a village shall be broken up into big plots of land exceeding over hundred acres. These plots can be taken over by the societies on long term lease for fifteen years or so and worked with modern tractors and mechanical appliances in co-operation with

the agricultural department. The ordinary cultivators shall be employed as agricultural labourers and this scheme will create incidental demand for the various subsidiary industries such as workshops which will carry on repairs to agricultural instruments, a supervising and clerical staff to carry on the work of the co-operative societies and the Marketing Boards to market agricultural products. These societies can further undertake the work of providing clean and well ventilated houses to the cultivators and also start rural industries to provide occupation for the cultivators in spare time. These industries might be of the ordinary factory type located in rural areas. Some typical industries may be mentioned below:—

(1) Manufacture of agricultural implements.

(2) Manufacture of paper pulp from bamboo in rural areas lying on the outskirts of forests.

(3) Poultry-rearing with possibilities in drying or preserving eggs for export or of manufacturing dried albumen.

(4) Preservation of fruits in air-tight tins in places where fruit growing is a practical possibility.

(5) The hand-loom, pottery and rope-making industries. From the ordinary pottery of the village there is considerable room for the expansion of a trade in ornamental pottery by improvements in designs and in methods of glazing. There can be possibilities of introducing rope-making machinery of a simple type.

The list given above is not at all exhaustive but just indicates a line along which action can be taken.

A large number of the educated unemployed will be absorbed if primary education is made compulsory and the residue will be absorbed in clerical and administrative jobs connected with the Co-operative Societies for farming and subsidiary village industries.

The introduction of Hydro Electric Scheme in all the Provinces will further help to ease the situation as far as unemployment is concerned and also put the cottage industries on a commercial and scientific basis. In India there is hardly any cottage industry worth the name which can be worked on a commercial basis with the help of gas or electricity and again the students trained in our Vernacular Schools, with the limited knowledge they have of the sciences, cannot be useful for cottage

industries run on modern lines. Prof. N. N. Godbole referring to the conditions in Germany and Japan in his evidence before the Sapru Committee stated as follows:—"In Japan and Germany there is hardly any cottage industry such as is generally thought of in India. All the cottage industries in those countries are of a different character altogether. There are two types of cottage industries as I have seen them in Japan. In discussing the question of cottage industries I take it for granted that those who are thinking of this problem are agreed that even in the case of cottage industries certain fundamentals are accepted. Firstly, there is compulsory free education and that the masses are literate. Secondly, that is in every village the motive power, that is electricity as also gas is made available as cheap as in Japan. Thirdly, there is a certain average knowledge of sciences like chemistry and physics. Both in Germany and Japan, coal, gas and electricity are available everywhere in the remotest corners of the village at extraordinary cheap prices. One reason why coal gas and electricity are cheap is that the electric tramway companies, coal and gas companies and the telephone companies are owned and managed by the municipalities themselves."

We have so far discussed the remedies which seek to reduce the wage-earning population and to create more employment. Another set of causes are the cyclic fluctuations leading to a succession of periods of prosperity and depression carrying with them changes in the state of employment and unemployment. Such cycles have a very definite bearing on the question of unemployment generally but to find remedies for the elimination of such sequences of 'boom' and 'slump' would open the discussion of a subject which in itself needs a separate treatment. Again the problem is more or less international and can hardly be confined to local causes. In broad outlines, however, it might be suggested that an attempt to secure among bankers an enlightened policy with regard to loans and a system of currency which keeps the general prices more stable will help to mitigate the intensity of such fluctuations.

In India the keynote of the currency system has been the stability of exchange rather than the stability of the price-level. On account of the practice of an unlimited sale of Council Bills by the Secretary of State, prior to the establishment of the Reserve Bank, at a particular price to maintain the stability of exchange, more and more rupees had to be coined in India. This increase in the volume of currency had its inevitable effect of raising the level of prices to a much greater extent in this country

than the other countries of the world. A perusal of the index numbers of prices and wages in India constructed by W. T. Layton in his introduction to "The Study of Prices" and the Index numbers of the Statistical Department shows, that in spite of the gold value of the rupee remaining stable for a long period, its internal purchasing power fluctuated heavily.

Again the disturbing factor, however, is the duration of the successive periods of depression and this should lead us to consider the measures of relief rather than the measures of prevention. As palliatives towards the alleviation of distress, the following remedies may be suggested. During the periods of depression the device of short-time work may be resorted to instead of dismissal of hands. Contributory relief funds should be started by associations of workers to be drawn upon during times of depression. Sometimes the downward fluctuations in demand for labour in one occupation are offset by upward fluctuations in another. Under such conditions unemployment will be diminished if there are labour exchanges to enable people to find work where work is available. There should be an inter-connected system of such exchanges and they should be real agencies for providing employment and not merely information bureaus.

In view of the fact that no statistical data are available in this country to determine the fluctuations in unemployment the various Provincial Governments should establish unemployment bureaus which should be in touch firstly with the Universities, secondly with the Educational Department, thirdly with the various industries organised through trade-unions and fourthly, with the settlement officers in the districts who should maintain records of the unemployed. The statistics collected by the provincial Unemployment Bureaus should be at the disposal of the census authorities for determining the periodic fluctuations in unemployment after every ten years.

THE UNEMPLOYMENT PROBLEM IN INDIA

BY

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Any attempt to deal with the problem of unemployment in India is met with the great difficulty of absence of reliable data. The unemployment Committees, appointed from time to time, have all felt the want of this material. Recent efforts to collect employment and unemployment statistics have not proved a success. Nevertheless, one can say that unemployment is there and it is getting worse day by day.

There seems to be general agreement that some degree of unemployment is inevitable in a society based on division of labour and exchange. The reason is not difficult to see. Some occupations are seasonal in character and this makes employment irregular. Changes in fashion and methods of production also give rise to problems of unemployment. Again strikes and lock-outs in one industry cause unemployment in others. It is thus evident that some unemployment is more or less unavoidable and the only cure seems to be in schemes of unemployment insurance which are now generally adopted all over the industrial world. But a more serious form of unemployment results from causes which are largely illusive and are summed up by the word trade depression. The analysis of trade depression has been a subject of much controversy among leading economists, which has made the solution of the problem more and more difficult. According to Pigou the causes of trade depression are psychological in nature. An undue optimism or pessimism among business men leads to trade depression. Hawtrey, on the other hand, makes it a monetary phenomenon. There is undue contraction of consumers' outlay accompanied by reduced production. Whatever be the ultimate causes of trade depression there is no doubt that it produces a great problem of unemployment over wide areas. Again Keynes would make unemployment in part a problem of population. Furthermore maladjustment of productive factors would also lead to unemployment.

Such considerations, however, apply mostly to countries with advanced industrial economy. In India, on the other hand, economic life is largely centred round agriculture. If, therefore, we turn to analyse the causes of unemployment in India we must look to the broad economic structure of the country. India is mainly an agricultural country as no less than 70 per cent of the population are dependent upon agriculture. It is this predominantly agricultural character of her economy that is responsible for most of the evils. Our methods of agriculture have not shown any sign of improvement and output per acre compares miserably with that of other countries. Social customs and inheritance laws have favoured divisions and sub-divisions of land with the result that about 72 per cent of the holdings are uneconomic. Seasonal unemployment in agriculture is only natural and periodic famines complete the round of the peasants' misery. This sums up the position of agriculture in India. Along side with that there is also the problem of an ever increasing population. According to the last census (1931) the population in India was 352·8 Millions, showing an increase of about 34 Millions as compared with that of 1921. The average density is 195 per sq. Mile and in thickly populated parts it is as high as 935 per sq. Mile. Mortality is high and periods of very high mortality are marked by crop failures, food shortage, famine and epidemics. It is now generally agreed that population in India is hard pressing upon the means of subsistence. Furthermore improvements in sanitary conditions, giving up of child marriage and adoption of widow remarriage would only lead to more increase of population. As Carr-Saunders has put it a more tragic situation could hardly be imagined—three of the most urgent social reforms would only magnify the population evil. Here we get the crux of the unemployment problem in India. There is a growing population depending almost entirely upon agriculture—a case of unbalanced economy.

The remedies must follow the analysis of causes. In the first place there is need for control of population and limitation of family appears to be the only way of escape. Secondly it is necessary to increase the national wealth before wealth per capita can increase. It is thus necessary to accelerate the pace of industrial development in India. India is tragically backward in this respect and her economic resources are lying undeveloped. Only 10 per cent of the population is engaged in industry. Any steps towards industrial development of India would be steps in the right direction.

In recent times much attention has been given to the middle class unemployment in India, that is, unemployment among young men whose training has been of a literary character. Such persons were generally absorbed in services, but with the increase of numbers the problem was getting more and more difficult and the prevailing economic depression and consequent retrenchment has made it worse. Much of the blame has been thrown upon our educational system and social customs, but such arguments lose their force when we realise that literacy in India is confined to only 18 per cent of the population. The question is not one of literary or technical education, but of increasing the avenues of employment, which in its turn requires a bold industrial policy.

The conclusion, therefore, is that having regard to the present economic conditions in India it is necessary to limit the increasing numbers, improve agriculture and diversify occupations by the growth of industries—large and small.

THE PROBLEM OF UNEMPLOYMENT IN INDIA

BY

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Various definitions have been attempted of the phrase "full employment" and "unemployment," and these have shown how difficult it is to draw the line at the point where unemployment ceases and voluntary choice of leisure takes its place. In actual fact, given a high enough wage rate or a marked fall in the pain of labour such as, *e.g.*, accompanies patriotic outbursts on the part of the nation, there will be a great addition to the number of people seeking work; and given a big enough fall in wage rates or a marked rise in the feeling of pain associated with labour, there will be a great addition to the number of people not seeking work. From this point of view, full employment is reached only when even an indefinite rise in wages no longer results in an increase in the supply of labour offering itself for employment or to put it in a different way, when the slightest fall in wages will lead to a contraction in the supply of labour offering itself for employment. From this point of view, there is no community where there is no unemployment.

It is clear therefore that full employment and unemployment involve somewhat different sets of concepts and that while unemployment means absence of full employment, full employment means more than absence of unemployment. What then is unemployment? Unemployment may be described as loss of employment by those who are already in employment. But it is not necessary, as Mrs. Robinson points out, that an unemployed person need necessarily be an unoccupied person; for the dismissed worker may, as an alternative to suicide scratch up a living somehow or other by his own efforts. In such a case, a decline of effective demand would lead to a diversion of labour from occupations in which productivity is higher to others where it is lower; this Mrs. Robinson terms "disguised unemployment."

In addition, there is a class of unemployed that does not come under the scope of our definition; and that is the juvenile and adolescent labour, which has never known employment. In order to include them as well we may add to the category of the unemployed also those young persons who want work at the existing levels of wages or even at slightly lower levels but who cannot get work. There are also those other members of the community who might suddenly find themselves deprived of an unearned income and might therefore seek employment at existing levels of wages or at slightly lower levels, but are unable to get it. These also could be described as a part of the unemployed. We might now define unemployment as "loss of employment of workers who were previously employed and inability to obtain employment by these and others who might not have been previously employed but who now seek for employment at existing levels of wages or at slightly lower levels." This excludes from the category of the unemployed those members of the community who do not want employment at present wage levels but who would do so at higher rates; for unemployment of this kind will be found in every community. I am also quite conscious of the fact that I am connecting up unemployment with inability to obtain work at a *particular wage level;* but I am doing this deliberately. Given certain assumptions and a low enough wage rate, there could not be much unemployment, just as given a low enough price there would be few commodities suffering from deficiency of demand. It is therefore no solution of unemployment to suggest that wages should be lowered indefinitely till full employment is reached.

Unemployment may be described as of the following four kinds:—

(1) Frictional.

(2) Cyclical.

(3) Seasonal.

(4) Disguised.

Frictional unemployment is that which arises from the fact that it takes time for different kinds of labour supply to adjust themselves to changes in demand, the total demand remaining constant. This is inevitable in any community where there are changes in tastes or in technique. This kind of unemployment is temporary; but even this can be obviated to a considerable

extent by instituting labour exchanges and a labour intelligence service of which parents can take advantage in choosing vocations for their children.

Cyclical unemployment is the unemployment which results from periodic fluctuations in total demand; and it is this kind of unemployment which has attracted the attention of economists the most. This kind of unemployment is more peculiar to industrially developed countries which have their economy organised on a capitalistic basis. It is not such a serious problem in the case of India. But it cannot be denied that it exists; and will probably increase in importance with the growth of industrialisation.

Seasonal unemployment is unemployment which is due to technical conditions of production. It is true that seasonal unemployment may also be the result of seasonal demand; but in this case, it would be possible, with conscious effort, to spread the work over the whole year; such a course, however, is not possible when the employment is determined by the technical conditions of industry. The most typical example of such an industry is agriculture, particularly in places where it is solely dependant on the rainfall. It is needless to say therefore that this kind of unemployment is a major problem in an agricultural country like ours.

Disguised unemployment is a new category added to the existing list by Mrs. Robinson; and in my opinion, it is a very important addition. By disguised unemployment is meant diversion of labour from more productive to less productive occupations. It can be described by a situation like, *e.g.*, when a country loses its export market for the products of its skilled labour, thereby leading to an addition in the numbers of its unskilled labour; or when a country is in a process of industrial decay. It would also describe a situation when the handicrafts of a country give way before mill products, but the labour thus released gets no employment in the more productive factory occupations, but has to fall back upon trades or occupations less remunerative than the handicrafts in which it was previously engaged. The last situation would really describe what has been happening in India.

We may now turn to the problem of unemployment in India. Our problems are mainly those of seasonal and of disguised unemployment. Not that we do not have frictional unemployment in some of the bigger cities. It is also not true to suggest that industrial or cyclical unemployment of the type found in the west is not to be found in India. The recent depression has

provided solid proof to the contrary as can be seen from the following table:—

Numbers employed (in 000s)

	In Mines	In Railways	In factories	Total of columns 2, 3 & 4
1929	365	818	1553	2736
1933	316	701	1405	2422

The fall in what may be turned organised industrial employment during the four years of the slump was as much as 314,000 or a little less than 12 per cent of the total labour employed. It is obvious therefore that cyclical unemployment has also begun to make its appearance in India; but compared to the total employed or employable population in India, the numbers of the cyclically unemployed are negligible. They do not constitute India's major problem.

If we turn to the number of workers engaged in agriculture, we really get to the heart of the problem. The relevant statistics are given below:

Numbers following as principal occupation.
Figures in 000s.

	Males	Females	Total
Cultivating owners ...	16,468	1,696	18,164
Tenant Cultivators ...	20,070	3,444	23,514
Agricultural labourers ...	12,477	7,717	20,194

This entire population of nearly 62 million persons who are engaged in agriculture, whether as employers or as employees, is variously estimated to be unoccupied from 60 to 150 days in a year. The Royal Commission on Agriculture themselves opine that persons engaged in agriculture in India have from 2 to 5 months of pure leisure. In strict theory, one should say that the 20 million agricultural labourers are unemployed for a part of the year, while the 42 million cultivating owners and tenant cultivators have leisure during the same period. But in practice, there is not much distinction between some of the cultivating owners and tenant cultivators, especially of those whose holdings are very small, and most of the agricultural labourers; and a number of these so-called employers

would come under the category of persons wanting work but unable to get it during the seasonal periods of apparent leisure. If we estimate this number at one half—and that would be a conservative estimate—of the employer class in agriculture we get 21 million cultivating owners and tenant cultivators as persons who are unoccupied for a part of the year and who would like to get some remunerative employment during that period. The total number of persons seeking employment—including in this number those who are unemployed as also those who are unoccupied—comes to 41 millions; and these are unemployed for a part of the year. Seasonal unemployment therefore accounts for 41 millions out of a total of 98 millions of workers in the country, assuming that those engaged in trade, transport and industry find work during the whole of the year. In other words, more than 40 per cent of India's occupied persons are seasonally unemployed.

It is more difficult to make any estimate of the volume of disguised unemployment in the country. That there is a large volume there can be no doubt. The progressive ruralization seen during the five decades preceding 1921 has brought to the land several millions who were previously employed in handicrafts, urban industries and other non-agricultural pursuits. It is a well known fact that there are on the land a number of people who really do not contribute to the production of agricultural output, and that if they give up agriculture, output would remain about much the same. These are the disguised unemployed of India, and their numbers are large enough to constitute a major problem in India's economy.

To sum up, India is suffering today from the two serious problems of seasonal unemployment and of disguised unemployment; and these are threatening to become a permanent feature of Indian economy. The combined result of both is to make production much less than what it could be; and the nation's standard of life gets unduly depressed. It is my belief that the presence of seasonal unemployment, particularly on such a large scale, is an economic fact of major importance; and must be taken into account in determining economic policy.

What is the best way of dealing with the question of seasonal unemployment? I think it can be met in two ways:—

(1) remove the seasonal character of the employment by changing the relevant technical conditions in such a way as to provide work for the whole year.

(2) provide seasonal employment of such a kind as to be only available during the period when these 41

millions are free from their main occupation; this would in effect mean employment for the whole of the year, but it would be in two different occupations.

The first alternative is not so impossible as it may appear at first sight. In fact, even today, cultivators who can get a double crop and others who grow garden crops do find work for the whole of the year. These are at present nearly 35 million acres which are sown more than once; and assuming one worker per 4·3 acres (dividing the total area sown by 62 millions), this area must be providing whole-year employment to at least 8 million persons engaged in agriculture. To give similar employment to the 41 millions who are seasonally unemployed would require an area of at least 176 millions acres to be double-cropped. This is not possible. With the best effort in the world, it is not possible to increase the area under irrigation by anything like even another 50 millions acres; and without irrigation, one cannot normally take up double cropping. It is not possible to do away with the seasonal character of India's agricultural industry. All the same, there is no doubt that the area under irrigation, particularly irrigation by wells and tanks, could be substantially increased; and it is the duty of the new provincial governments to take up this work as early as possible, for the problem of India's unemployment is urgent and should brook no delay.

The other alternative left to us was that of providing seasonal employment so timed as to do away with the seasonal unemployment of these 41 millions. In most parts of the country, this would probably mean employment during the months of February, March, and April. To do this means the development of certain *types of industries* the nature of which we shall now proceed to examine. First the industries must be such as can be profitably worked for 3 to 4 months during the year; in other words, the fact of their machinery or equipment being idle during the greater part of the year must not result in the industry proving a losing proposition. Interpreted in economic terms, this condition means that capital investment in such industries should be very small, and other overhead charges also should be very low. We can put the same thing in a different way by saying that these industries must be such that prime costs form the largest part of the cost of production of their output, and overheads only a small proportion. This means in turn that the industries must be as little capitalistic as possible, using the phrase "capitalistic" in the sense of "involving the

use of capital." Industries in which labour charges form the largest part of costs are usually the handicrafts. The building industry, particularly that branch of it which deals with repairs of buildings and roads, and construction of roads, cleaning of tanks, canals etc., can also be a very good seasonal industry.

The other condition to be satisfied if the seasonal employment were to be taken advantage of is that the skill required on the part of the workers employed should not be very high. It must not be forgotten that the type of labour for whom this employment is intended has as its major occupation another industry, *viz.*, agriculture; and that therefore the work offered to them should be simple and easy to understand. The handicrafts therefore must be of such a kind as not only to involve little capital to run them but should also be such as can be run by comparatively unskilled labour.

A third and obvious condition is that these industries must be located in rural centres to which agricultural labour can easily and inexpensively resort when it finds itself unemployed. The growth of urban handicrafts can at best be only a partial solution to the problem of India's seasonally unemployed and care must therefore be taken to see that the handicrafts encouraged are located in villages or at least in such small towns as really from the centre of a group of villages. I conclude therefore that there is a clear economic case for handicrafts in this country. Handicrafts located in rural centres and working for a part of the year constitute the best way of providing seasonal employment to the 41 million persons engaged in agriculture who regularly experience seasonal unemployment. I suggest that Government have a special responsibility in this matter; and popularly constituted as they now are in the provinces, they would also be able to obtain public support for any schemes which they may undertake. It is therefore a matter for congratulation to find that at any rate some of the new provincial governments are showing a keen interest in the promotion of handicrafts in their respective provinces. My only criticism would be that their policy is not positive enough in this direction. It is not merely sufficient to give financial or other support to the existing handicrafts. It is necessary to see that the industrial development of the country proceeds on such lines that additions to its industrial production take place mainly through the medium of handicrafts. At any rate, all new industrial establishments can be licensed and permitted to operate only if they are located in rural centres. Government can also concentrate the constructional part of their rural development programme such as road

repairs, building of new roads, clearing up tanks and canals, putting up and repairing forces, etc., entirely during those months when agricultural labour is unemployed. In the meanwhile, vigorous research work should be undertaken to find such substitutes for imports as can be produced by handicrafts. Government should also go ahead with the task of extending the area under irrigation, particularly by giving subsidies to villages, building new tanks, etc. In these ways, the state may do something towards meeting the problem of unemployment in India. The private individual too, if he likes, can do his little bit by voluntarily extending his patronage to the products of handicrafts.

To sum up, unemployment in India is mainly of a seasonal kind. The number of those seasonally unemployed is estimated at 41 millions. To solve it, it is necessary, on the one hand to extend the area under irrigation, garden crops, etc.; on the other, to provide handicrafts in rural centres which will work only for 2 to 4 months in a year and provide employment to the seasonally unemployed just when they need it.

Conference Proceedings

HIS EXALTED HIGHNESS THE NIZAM'S MESSAGE, TO THE 21ST SESSION OF THE ALL-INDIA ECONOMIC CONFERENCE HELD AT HYDERABAD-DECCAN

I feel gratified when I see that the Osmania University is not only spreading enlightenment among my subjects, but is also creating more and more intellectual contacts with other parts of India. In the beginning of the year we had the Indian Science Congress in our midst and now at the end of it I am pleased to know that the Economists of India are holding their 21st session in the capital of my Dominions.

The prosperity of a country is closely connected with the scientific study of its economic problems and it is a happy sign that we in India have realised the importance of this connection and have made provision for the teaching of Economics in our Universities. I hope that this Conference will stimulate the interest of my people in their economic affairs and in the possibilities of the economic development of Hyderabad. India is a country of rich natural endowment and it is the privilege of Indian Economists to show ways and means of placing India in line with the most advanced countries of the world. I wish the Conference every success, and hope that the delegates will enjoy their stay in my Capital.

WELCOME SPEECH DELIVERED BY NAWAB MAHDI YAR JUNG BAHADUR AT THE 21ST SESSION OF THE INDIAN ECONOMIC CONFERENCE HELD ON THE 28TH DECEMBER 1937 AT THE TOWN HALL, HYDERABAD (DECCAN)

Mr. President, Ladies and Gentlemen,

Let me first of all extend a very cordial welcome to our distinguished visitors from outside who have done us the honour of coming to Hyderabad and holding their conference here. While welcoming them we, at the same time, wish to express to them our gratitude for having taken the trouble to come all this long distance to Hyderabad. Recently, there have been quite a number of conferences in this place. For instance, only a short time ago the members of the British Association visited us. Before that the All-India Science Congress was held at Hyderabad, and the Engineers' Conference as well as Road Congress are coming shortly, whilst two years hence the Oriental Conference will be held at Hyderabad. These conferences have a great value for they not only make possible an interchange of ideas but also help to make. co-ordination and co-operation in scientific research easier. This method of conference is also of use in that it not only brings about personal contacts but enables us to keep pace with the times. It further helps us to discuss with eminent authorities subjects on which they could best enlighten us. The Economic Conference is of particular value as it deals with a subject which may truly be described as being the science of life itself. For it teaches us how to attain that material prosperity which is so necessary to moral advancement. The value of the present Conference becomes all the greater as it is composed of some of the most distinguished economists in the whole of India.

Realising the importance of the subject, we in Hyderabad have created a Faculty of Economics in the Osmania University. It consists of four professors one of whom had the distinction of being sent by the London University to several parts of the British Empire in order to conduct an economic enquiry. But even so, the Faculty is not yet fully developed and perhaps one of the benefits that we may hope to reap from the presence of our distinguished visitors will be to obtain their advice as to how this Faculty could be further developed and strengthened.

Gentlemen, the economic problems of any country depend on many factors the chief of which is the existence of resources. We have great natural resources in this State which we hope to be able to exploit to the full. But the greatest problems of all which are common to the whole of India, are those of the employment of the educated and the uplift of the agriculturists. We are trying to deal with these problems by first of all trying to improve the life of the cultivators, and secondly by reorganising our education so as to enable young men from our schools to take up productive work which will increase the wealth of the country. I will not trouble you by explaining in detail our educational schemes, but I may say that as regards education we are proceeding on somewhat different lines from British India. There the slogan is "Earn while you learn." We on the contrary think that earning and learning do not go well together and that they would tend to impede each other. In so far as the primary stage is concerned, we on our part hope to make education at this stage more attractive, more comprehensive and better suited to the needs of the people. Earning does not start at this point. In the secondary stage of education, we hope to give our boys and girls a bias for vocational education so that later on those who are fitted for taking up different occupations may pursue them. This is a great experiment, but we mean to try it in earnest as we believe that we are working on the correct lines.

Gentlemen, I hope that you will be able to see something of the progress we are trying to make in this State in various directions, and that you will be able to carry away impressions which, I hope, will be not unfavourable. For I may say that under our enlightened Ruler, Hyderabad is rapidly becoming a centre of intellectual activity. Thus, apart from the conferences of which I have spoken, the State has taken part in intellectual activities outside its boundaries by being represented on various learned bodies in British India like the Board of Education, Agricultural Committee and so on. I hope these contacts will become closer and stronger and will result in the mutual benefit of ourselves and British India.

In conclusion, I wish to repeat my welcome to you and to express the hope that you will give us the benefit of your learning and experience and forgive us for any shortcomings that you may find in your reception here. I will now ask the Right Hon'ble Sir Akbar Hydari, who has a message to give you from His Exalted Highness the Nizam, to open the Conference.

INAUGURAL ADDRESS

BY

The Rt. Hon. Sir Akbar Hydari Nawab Hydar Nawaz Jung Bahadur P.C., D.C.L., LL.D.

Ladies and Gentlemen:

Let me begin by expressing my gratitude to the members of the Reception Committee, and in particular to its Chairman, Nawab Mahdi Yar Jung Bahadur, for their kind invitation that I should open the 21st Session of the Indian Economic Conference. I greatly value the opportunity thus afforded me of extending to so many of the distinguished economists of India a hearty welcome to the capital of the premier Indian State. I cannot think that it was wholly by accident that you selected Hyderabad as the scene of your sessions this year. In fact, I regard your choice of venue as highly significant. As economists, you are naturally conscious of the ties which link the Indian States and British India. I should like also to believe that your presence here today affords an additional proof, if any were needed, of the importance of the place which the States are now recognised as holding in the polity of our Motherland.

The days have long gone by when the Indian States were regarded as mere unwanted appendages of British India. For it is now recognised that they are the traditional exponents of a political urge which has made itself manifest throughout the many centuries of our history. This urge is derived from the astonishing range and variety of the cultures which are the glory of India. The preservation of these cultures is as much a part of our national heritage as the right of our country as a whole to control its own destinies. From very early times the Indian States have been the traditional homes of Indian culture; and through all the vicissitudes of changing fashion have preserved intact the ancient cultural conceptions of India. The richness and variety of Indian local cultures present no obstacle to the progress of the country as a whole; indeed we may discern in the recent inauguration of provincial autonomy in British India, a recognition of the value of the principle of local diversity which is the counterpart of the fundamental unity of our country. The true welfare of this great land of India depends upon the

preservation of an equilibrium between the forces which make for unification and the forces which derive their strength from the age-old striving for local autonomy. Each set of forces is indispensable within its proper sphere; and the country as a whole, so history teaches, has always suffered if one set of forces is permitted to trespass too widely upon the sphere of operation of the other. May I be permitted to point out that a realisation of this vital truth has throughout inspired the Asafiah House of Hyderabad to adopt its two-fold policy of contributing on the one hand to the welfare of India as a whole, and of preserving on the other that wealth of tradition, administrative, cultural, social, and economic, which is characteristic of the genius of the people of these Dominions? Here in Hyderabad we present in some respects a miniature-picture of India as a whole. The Deccani culture which characterises us has been built up through centuries by a synthesis of diverse races and different faiths. To this synthesis, Buddhist, Hindu, and Muslim elements have all made their contribution. I trust that you, Ladies and Gentlemen, in the course of your very welcome visit to us, will find opportunities of exploring for yourselves the rich treasures in the realms of art and architecture which constitute some of Hyderabad's most distinctive contributions to the cultural wealth of India. But I should like also to remind you that in the realm of literature also, the Deccani culture to which I have referred can show its particular triumphs. Here then, within the Dominions of His Exalted Highness, we have our own "unity in diversity" which is so typical a feature of India as a whole. And just as we have always welcomed to our midst, and utilised as elements in our heritage, the cultural influences which have taken their rise beyond our borders, so do we on this occasion also look to you to throw the light of your experience upon the problems common to us both.

Will you allow me to indicate very briefly certain of the topics which are at the present moment demanding the close and concentrated attention of all men of good-will? The problem which perhaps springs most readily to the minds of us all is that of unemployment. On this subject, there has been much writing and much speaking; its causes have been analysed from many different points of view. In essence, the fundamental fact is simple. At the moment, there is not enough work of particular kinds for people who desire to undertake productive labour. I suggest that in essence the problem is one of readjustment. Our country possesses natural resources of almost every kind. If these were utilised widely and well, I for one cannot believe that

there would not be work for all. But adjustment is essential. We must on the one hand modify our economy to permit the scientific utilisation of these natural resources; and we must on the other hand bring about such changes in the traditional lines of our educational system, that the rising generation is adequately fitted to take advantage of the opportunities thus opened to it.

The real remedy for unemployment, in my view, lies in bringing our educational system into conformity with the problems of the day. The quicker we can make this change, the sooner shall we be able to terminate the maladjustments of the moment, and the distressing difficulties encountered by the graduates and undergraduates who vainly seek work while immense opportunities for work lie so close at hand.

You will be pleased to hear that the reorganisation of the educational system of this State is based upon this necessity of bringing education into conformity with the needs of the people. I am confident that by pursuing this policy, we shall achieve a double gain. In the first place we hope largely to solve the problem of educated unemployment; and in the next place we aim at a wide-spread development of the economic resources of the State. The combination of these two benefits will lead to a cumulative advantage. The new methods and the new ways revealed to us through the progress and application of scientific knowledge will in their turn lead to a more balanced adjustment of our whole economy. Government and governed will alike benefit from the increasing intimacy of the relation between natural resources and trained intelligence. I look to you in the confident hope that your deliberations will throw light upon many of these problems.

Another topic which will doubtless engage your attention is that of indigenous banking. Some of the problems connected with this subject in this State are almost identical with those which many of you will have studied in the different Provinces. In Hyderabad, as elsewhere, the principal problem is to co-ordinate and connect with one another, the innumerable channels, large and small, through which the capital resources of the country flow. In this respect, our task is identical with that of the country as a whole. For, while we hear less talk than was formerly the case of the proverbial shyness of Indian capital, the evolution of a banking system which will make the best possible use of the capital available still presents certain difficulties. The particular line of enquiry upon which we in Hyderabad are engaged at the moment is that of so co-ordinating our capital resources as to use them most effectively for the

agricultural and industrial reconstruction of the State. At the present moment, an expert inquiry is being conducted into this side of the problem; and we shall hope to profit much by your own discussions. Linked with this problem of indigenous banking is the complicated one of the trade cycle, necessitating analysis of the causation of recurrent booms and depressions. This, as I need hardly say, is a matter of the most vital interest to those of us who are concerned with the task of administration; for the economic havoc caused by these periodic fluctuations necessarily produces percussions throughout the entire structure of a government. So much is this the case that in many western countries, as you are well aware, it is regarded as one of the duties of the State to influence, so far as may be, the course of the trade cycle, by taking such measures as seem calculated to level off the apex of the booms and to grade the steepness of the depressions.

Another important topic on your programme is the rehabilitation of provincial finance. This is a matter of the greatest importance. For the success of self-government in the provinces, of which the measure is the benefit conferred upon tht people, must depend very largely on the capacity of those now assuming the direction of the Provincial Governments to utilise in the most scientific way the financial resources at their disposal. You may perhaps be interested in the system which, after careful experiment, we have arrived at in Hyderabad. Here the Finance Department makes triennial allotments for each department on the basis of its average annual expenditure. It has been found that this plan leads on the one hand to thoughtful and well-considered schemes of long-range development; and on the other, eliminates that wasteful outlay which sometimes characterises departmental expenditure towards the end of each twelve-month, under the system of annual budgeting where the unspent balance has to be returned. By a further refinement, we have introduced a system under which any surplus at the end of the triennial period is shared between the department showing the surplus, and the various nation-building departments of the State. We have found ourselves that the system makes for economy and efficiency in management. It may well be—and here I do not profess to be dogmatic—that a system which has served us so well may be found useful in other parts of the country. But this at least I assert with confidence: it is all to the good of the country as a whole that such experimentation as has, in Hyderabad, produced our departmentalisation of finances, should be taking place. For obvious reasons, it is easier to make experiments in the

Indian States than in British India, and here again, I would ask you to appreciate the benefits which our country as a whole may obtain from that " diversity " out of which our national " unity " is made up.

In all these matters to which I have referred, there is one fundamental postulate: an adequate knowledge of economic facts. I had occasion last year in this very hall, during the sessions of the Science Congress, to draw attention to the importance of the science of statistics. Accurate statistics constitute the sole guide, both of the economist and of the administrator. As we all know from our own experience, it is only too easy to arrive at conclusions which are the result rather of our own personal predilections than of any impartial weighing of the precise facts. But if we lack a knowledge of the precise facts, what hope has any one of us that our decisions will remain uninfluenced by the personal equation? Party politics, the turmoil of elections, the need of attracting the suffrages of the people, tend inevitably to make one partisan of one view or the other. Without the assistance of accurate statistics, we have no material upon which we can form a right judgment. But even when this material is available, it is necessary that we should consider it with impartial minds. We must free ourselves from the trammels of communalism; we must recognise the fundamental unity of our interests. It is in this direction, if I may say so, that the Indian Economic Conference, consisting as it does of men trained by their academic experience to take detached views, can provide invaluable guidance to the administrators and statesmen of our country. Here in Hyderabad, we have not been slow to recognise the importance of the function which the Indian Economic Conference is performing for the country as a whole. We have had a Statistics Department of the State working since 1919; we have established our own Economic Association for an impartial study of the economic problems of the State, and we have also a School of Economics in the Osmania University, which is devoting a share of its attention to an impartial consideration of the economic needs of His Exalted Highness's Dominions. We feel that by collecting a body of investigators whose eyes are fixed single-mindedly upon the common interests of us all, we make a practical contribution not only to the economic progress of the State, but also to the elimination of communal feeling and partisan judgment which lead to unnecessary friction.

We find ourselves here in Hyderabad in a position which calls for economic planning. No one is more keenly alive than

we are to the dangers of insufficiently considered State intervention. At the same time, unless economic progress proceeds in accordance with an ordered plan, past work and past investigations are all labour lost and potential advance may degenerate into a policy of drift. It is along these lines, therefore, that we are facing and considering the problems which confront us in the economic sphere. I have already alluded to the emphasis which we are laying on vocational education. I have further alluded to our present inquiry into banking. We are investigating the economic burdens of our agriculturists, and the possibilities of relief through consolidation of holdings, liquidation of debts, and increased security of tenure; combined, as must obviously be the case, with improvements in methods of agriculture and in the condition of the land. It is hoped that in connection with the banking inquiry, we may lay the groundwork for increasing credit facilities, where scientific marketing and grading of produce has already been undertaken. The provision of cheap power is also in our minds, and a survey is being made with the object of utilising the hydro-electric resources of the State. Additional railway development will result in opening up areas of great economic potentiality. It must be part of planning to think out how best to preserve the balance between private enterprise and State action.

I hope I have not detained you too long. I only trust that these remarks of mine will have enabled you to realise how keenly interested we are in your visit to us; how eagerly we await the light which your deliberations will throw upon the problems which are exercising both you and us in common, and how warmly we are associating ourselves with your efforts to promote the economic welfare of our country as a whole.

Ladies and Gentlemen, it is with the greatest pleasure that I declare the Twenty-first Session of the Indian Economic Conference open.

THE CENTRAL PROBLEM OF INDIAN ECONOMY

BY

P. J. THOMAS, M.A., B.Litt., D.Phil. (Oxon),

Professor of Economics, Madras University, Member, Legislative Council, Madras.

Ladies and Gentlemen,

I am thankful to the Indian Economic Association for choosing me to preside over its deliberations this year. Twenty years ago, I had the privilege of attending the first session of the Conference held at Calcutta. It met in a room in the Calcutta University Buildings and not many persons were present. Since then the Association has grown in number and influence, thanks to the solicitude of our older economists, some of whom I see before me here to-day. A momentous step in self-government has lately been taken in the Provinces of India, and the Association is expected to give the lead in economic matters to these Governments. It is for persons of riper age and mellowed wisdom to give such a lead. I shall only perform the *nāndi*[1] by giving a brief analysis of what I consider to be our fundamental economic problem to-day.

1. The Problem of India is not merely one of Recovery.

The most distressing feature of India's economic position is that in spite of the large increase in foreign trade and industrial production in the last seventy years, there has not been any appreciable improvement in the standard of living of the masses. Before the War, India depended on Lancashire for about 75 per cent of its cotton cloth, and nearly all the refined sugar, matches and iron goods consumed here came from outside; but to-day we produce in this country almost all our sugar and matches, about 83 per cent of the cotton cloth and a large proportion of our iron and steel goods. In 1920, India imported cotton piecegoods worth about Rs. 58 crores and sugar worth Rs. 15 crores, but in 1936-37, the import values of these goods came to only Rs. 13 crores and Rs. 23 lakhs respectively. Nor has this industrial advance been achieved at the expense of our agriculture; in food-crops, production has kept pace with the

[1] The act of worshipping the dead ancestors with the view of appeasing them at the commencement of a Hindu marriage in Madras Presidency.

growing population and in 'cash' crops like sugarcane a large increase of production has taken place.

In spite of all this advance in production and trade, the economic condition of the masses still remains unsatisfactory. With all the increase in production, labourers in organised industries still number only 1·6 millions or less than ½ per cent of the total population. Our information about income and standard of living is inadequate, but we have enough evidence to show that living standards, even of urban labourers, remain very low. According to a recent report of the Bombay Labour Office, certain classes of industrial labourers consume the maximum of cereals allowed by the Famine Code, but less than the diet allowed by the Bombay Jail Manual. Sir John Megaw estimated that about 41 per cent of the people of India are 'poorly nourished' and 20 per cent 'very badly nourished.' This is no wonder, seeing that the average rural incomes in India are between Rs. 50 and Rs. 70 per annum and that even in our cities there are classes of labourers whose monthly income does not exceed Rs. 10. In a country like India, any rise in the standard of living is bound to be reflected in the consumption of such articles as cotton cloth and factory sugar. Between 1913-14 and 1936-37, the *per capita* consumption of cotton piece-goods ranged between 13 yards and 16 yards per annum, and there has been no definite improvement. The same tendency is more or less seen in the matter of sugar also. A distressingly low standard of living has been persisting in this country for a long time.

It has lately been customary to impute the economic ills of India to the trade depression. In many countries, especially those narrowly specialising in certain kinds of industry or agriculture, there has been a severe setback in production, trade and employment; but in India, on the other hand, the years of the depression coincided with a large expansion in industrial production, thanks largely to the Government's tariff policy. Since 1928-29, the production of cotton piecegoods has increased by 89 per cent, sugar by 1016 per cent, pig-iron by 213 per cent, and steel by 151 per cent. Nor has export trade fallen, in quantum. There has been a large increase in the exports of raw jute, raw cotton and oil-seeds, which are the mainstay of our commercial agriculture. The increase between the post-war period and 1936-37 was 50 per cent in cotton, 67 per cent in raw jute, and 380 per cent in groundnut. No doubt the terms of trade turned against India by a large disparity between export and import prices (22 points) between 1929 and 1931, but the

disparity got narrowed down to 4 points in 1936-37. All this helped in maintaining purchasing power in the country. Rural debt is still a serious problem, but it was a crying evil even in 1928, and no degree of recovery will wipe it out. It can only be cured by a reconstruction of rural economy. Therefore, the problem of India, to-day, is not merely one of recovery, but of solving our perennial problem of poverty and a low standard of living.

2. India's low standard of living is largely due to Inefficient Production and Inequitable Distribution.

India has abundant natural resources and a large labour supply to utilize them. The two prime essentials for economic activity are therefore available in ample measure, and yet the resources remain untapped and man remains poor. For this state of things, various causes have been assigned. In my opinion, it is due to two factors: (1) inefficient and inadequate production and (2) inequitable distribution. These two causes interact on each other at many points. Owing to technical inefficiency and a colossal waste of labour and resources, Indian production is at a low ebb, and therefore the share of income available to each person is also very small. India needs much more of consumable commodities if the standard of living of its teeming millions is to rise to a satisfactory level. The purchasing power needed for effecting this increase of commodities must be generated in the productive process itself. But the productive system of India is vitiated by many serious evils. It never distributed purchasing power equitably and it has been clogged by an unjust system of distribution. Too small a share of the purchasing power resulting from production has been going into the hands of the producing and labouring classes and too large a share into the pockets of certain classes which are economically sterile. This needs some explanation.

In India, the producer, whether he be a cultivator or an artisan, depends on moneylenders and traders for capital and marketing, and the nature of the bargain is generally such that he seldom gets any reasonable share of the fruits of his labour. All over the world, even in Soviet Russia and the U.S.A., agriculturists obtain a much smaller portion of the national income than their labour entitles them to. The agencies that trade in agricultural produce obtain with less effort a much larger share of the income from land. Sir Josiah Stamp says that 'the world as a whole and over a given length of time has

almost certainly been fed below cost price for the last 100 years, if one takes into account the proper elements of costs.'[1] The position is worst in India, because here the middleman makes profit not only by handling agricultural produce but by advancing money to the agriculturist on unconscionable terms. Contrary to the expectations of the British administrators who carried out the early land settlements in India, a large number of middlemen have come to possess rights in land and therefore claim a share of the income arising from it, with the result that the share of the actual tiller has become small, especially in parts where the competition between cultivators is keen. From his meagre share, the ryot has to meet the claims of the moneylender, who may be the landlord himself, and in many places all this sharing takes place on the threshing floor itself. In the ryotwari areas, the Government too gets a good slice of the income from land. What is left to the cultivator is hardly a living wage, and he has soon to borrow for maintaining himself and family. Thus even in normal times, the agriculturist is in want and in debt; and when crops fail or cattle die, he has to mortgage his land, and mortgages generally end in loss of land. Thus the position of the ryot is like that of 'a man standing permanently up to the neck in water, so that even a ripple is sufficient to drown him.'[2]

Nearly the same conditions obtain in the handicrafts; and the artisans are everywhere steeped in poverty and debt. India formerly possessed weavers and other artisans whose skill was unsurpassed, but even they had to work under conditions of semi-slavery for a bare pittance. The muslins and chintzes they made were the marvel of the world, but our economic and social system denied them the right of obtaining in society the position they deserved, and the fruits of their industry went into the pockets of middlemen. Thus the bulk of the purchasing power generated in the course of production remained with the employing classes, and the masses were kept in a miserable condition.

With the dawn of modern economic conditions in India—a money economy, statutory rights in land, registration of money claims, laws of contract and civil procedure and courts to administer them—the lot of the agriculturists only became worse. Their credit increased when land laws were enacted, but facile credit proved a curse to most of them. As Gide puts it, 'credit holds up the landholder as the rope holds the hanged man.'[3]

1 *World Agriculture* (Royal Institute of International Affairs), p. 260.

2 Tawney, *Land and Labour in China* (1932), p. 77.

3 *Political Economy*, (Archibald's Edition), p. 394.

Landholders freely used their credit to borrow, mostly for non-productive purposes; but repayment was difficult and the new law courts, unlike the old panchayats, gave all facilities to the creditor to recover his claims. Thus land alienation became common and the condition of the agriculturists became worse. The new laws and courts were no doubt suited to a commercial society but they proved injurious to our rural population.[4] With the increase of foreign trade after 1860, towns grew in size, an urban middle class arose and professional men carved out large incomes, but the rural masses who made all this possible benefited little by it. The balance of trade in favour of India went on increasing year after year, and much money flowed into the country, but the bulk of it went into the pockets of merchants, moneylenders, and other middlemen. The unequal distribution of income, already a feature of the Indian productive system, became even more pronounced in this way, and the purchasing power of the masses continued to be low.

Had the people who obtained the bulk of the profits from agriculture and handicrafts invested their earnings in productive enterprises, the economic system would have functioned better. This is what happens in all advanced countries, including Japan. In 1868, when Japan was opened to foreign trade, the landlord and trader put their savings into productive enterprise and thus the country developed rapidly. But in India, the habits of moneyed persons have not been conducive to productive activity. They bought gold or lands or gave out money at high rates of interest to needy persons—all more or less sterile pursuits. Year after year, a large part of the trade balances in favour of India came in the form of gold or silver mostly for hoarding purposes. Between 1835 and 1925, as much as Rs. 1,300 crores, or 52 percent, of our merchandise balances were converted into gold and silver, and thus got sterilised. Such an unproductive use of the annual surplus was hardly calculated to increase employment or circulate purchasing power. Further, the classes in whose hands the profits accumulated were those noted for their parsimonious ways of living. As a well-known English economist wrote in 1820, " the principles of saving, pushed to excess, would destroy the motive to production."[5] This is particularly so when savings are converted into gold or lands. In Bombay

[4] Thorburn, *Muhammadans and Moneylenders* (1886), pp. 78—92; Calvert, *The Wealth and Welfare of the Punjab*, p. 123.

[5] Malthus, *Principles of Political Economy* (1820). p. 8, 9.

and elsewhere, a few Indian capitalists ventured into industry long ago, but the growth of such enterprise has been slow and the type of industrial organisation adopted was not the most conducive to the national welfare.

As the savings of the country were so largely hoarded, labourers found little opportunity at home and sold their labour abroad, on such unfavourable terms and with such undesirable results as to make Indian coolie labour an object of contempt. Nor had educated persons any chance for suitable employment, and those who received education in the new schools crowded into the government services or became lawyers. It must be admitted that the influx of British capital into the railways, jute mills and tea plantations of India from about 1860 did something to relieve the persistent paucity of purchasing power in this country. But such investments slowed down during the war and have almost ceased since. Year after year, increasing numbers of eligible persons have been sent out by the Universities, and with all the elaborations of the administrative machinery, the Government have found it impossible to employ them all. Thus has arisen the serious problem of unemployment among educated persons, a problem in some ways more alarming than the under-employment which is keeping down the standard of living in rural areas.

The state of things explained above seems to lend support to some of the familiar under-consumption theories. Too large a proportion of the income derived from production has been going to the capitalist classes, while the producing and labouring classes have been living on the subsistence level. Unfair tenancy conditions, unjust loan transactions and inequitable modes of marketing have been instrumental in bringing about this condition. The result has been under-consumption, which in turn has led to under-production. Owing to the largely unproductive use of savings year after year, little increase of investment has taken place, and the common people have been always under-employed and have been living on minimum requirements. This has made them bad producers as well as bad consumers; for, in the absence of equitable distribution, there cannot be an efficient system of production.[6] Thus a vicious circle went on operating all the time and has committed havoc on our economic system.

[6] Cf. "From the want of a proper distribution of the actual produce, adequate motives are not furnished to continued production." (Letter of Malthus to Ricardo, 7th July, 1821).

Not only has this baneful system kept India poor and undeveloped; it has also upset the balance of world economy.[7] Had the purchasing power of the teeming millions of India and China been higher, economic internationalism would have functioned more harmoniously and food-stuffs would not have been destroyed in one part of the world while the other part was hungering for food. Nor is this *impasse* likely to be rectified without an increase in consumption in Asiatic countries.

There are still some people in India who, on one ground or other, disapprove of an increase in material comforts. They forget that the large numbers of people who are below the poverty line and a good many of the job-less educated persons are not asking for comforts but for enough to satisfy elemental needs. It will have to be conceded that for the 'good life' which Aristotle postulates as the object of political society and even for the attainment of the higher spiritual ends, a modicum of material comfort is essential. *Primum est vivere, deinde philosophare.* Further, the interests of social security to-day require that the economic condition of the masses in India should be improved. The yearnings for a better life have lately spread among the common people and it is in the interest of all concerned to satisfy them in some way.

Therefore, from every point of view, national or international, social or economic, selfish or altruistic, it is necessary to raise the standard of living of the Indian masses to a higher level, and this must be the prime consideration in our future policy.

3. The Increase of Production and Purchasing Power.

How is this to be done? The standard of living depends on income and its utilization; income depends upon production, which in turn is the result of the utilization of labour and natural resources. Therefore in order to raise the standard of living, the labour now wasted and the material resources lying idle must be mobilized for productive activity, and the fruits of such activity must be equitably distributed. Throughout the country, especially in rural areas, there are workers who are unemployed or inadequately employed during a large part of the year. Further, their labour is not efficient enough, and too small a part of the fruits of their labour goes to themselves. This inefficient system of production must be set right, and in doing so, the

7 Cole, G. D. H., *The Intelligent Man's Guide through World Chaos*, pp. 50-1.

present inequitable system of distribution should also be rectified. A larger production and better distribution,—this, in short, is *the* problem of India, to-day.

It is clear from the above that our economic problem is somewhat different from that of most Western countries. Many of them have developed their productive resources to the utmost, depending on foreign markets, and some are now trying to curtail rather than increase production, as those markets are proving unsteady and as population is on the decline. To many of those countries the problem is chiefly one of distribution. For us in India, production is still the principal problem; we have a large potential market for all kinds of consumption goods and therefore production must be increased, in order that there may be more goods and more purchasing power to buy them. Further, the producer in India whether agriculturist or artisan largely supplies his own labour, and to that extent, distribution has a narrower scope than in the capitalistic agricultural or industrial systems. Indeed a better distribution is necessary between the producer and his sleeping partners (landlord and moneylender) if production is to increase. Yet, as an American economist says about his country: "We are not interested in maintaining a static situation in which the total income, even if equally distributed, would be altogether inadequate; we are interested rather in producing a dynamic situation in which increasing quantities of newly created goods and services would become available for every one."[8] This is much more true of India than of America. We have so small an aggregate income to be distributed that all talk of equalization is somewhat premature. Social justice is indeed needed, but its claims must not be so urged as to deflect us from our main purpose.

Further, in devising the plan for rebuilding our economic system, our national genius and cultural heritage must also be taken into account. A steam-roller or automobile will do its work equally well in Berlin or Bombay, but certain economic or social systems found suitable in the West need not be so for us, as the social fabric of this country is materially different from theirs. Our attempts at increasing production and improving distribution must take all this into account. Our agriculture and industry must develop in accordance with our own social and economic environment. After all, economic development is not an end, but only a means.

(a) *Industrialization.* We will take industrial production

8 Moulton : *Income and Economic Progress* (1935), p. 83.

first. A good many persons think that the immediate need of India is the rapid expansion of largescale industries. Few will deny that the present economic system of India is overweighted on the agricultural side and that a larger proportion of the population must be made to depend on industries, but all will not agree that wholesale mechanisation will solve our problem. On the mass production basis, all the requirements of India in the way of finished goods can be met by a few factories congregated in one or two centres, but on this basis we cannot give employment to a fraction of those who need work. Textiles, sugar, iron and steel goods—these are the consumption goods needed by this country in large quantities. In these, we now produce almost enough to supply our internal market, and yet all the industrial establishments employing more than twenty persons have absorbed only an infinitesimal part of the large labour force in this country. Consumption may increase in future, but judging from the rate at which labourers have been absorbed in the past and considering also the fast growth of technological improvements, the prospects for full employment in this country on the mass production basis are very gloomy. There are also other circumstances which must be taken into account. The workers whose labour is now wasted are primarily agriculturists, and, on many grounds, it is not advisable to transplant them from their rural habitant to crowded cities. Recent village surveys in South India have disclosed the fact that more of the artisan classes, being deprived of their hereditary occupations by cheap imports from abroad, have lately changed over to agriculture, thus increasing the pressure on land. These people, being tied to land, may not migrate to factories; factories must be blought near them.

No doubt, a certain number of key industries will have to be conducted on the mass production basis in large factories with all the up-to-date equipment, but in the case of ordinary industries nearly as much efficiency can be secured in small units, especially if cheap electric power can be distributed and provision made for efficient marketing. Recent hydro-electric developments and improvements in transport enable such scattered units to obtain the external economies which hitherto were available only to large factories. It is the cherished aspiration of our best minds that this country must be saved from the moral and physical ills resulting from industrialism, and Mahatma Gandhi's lead in this respect may with advantage be accepted in other countries also. Machine has had the better of man; it must be brought under man's control.

That an efficient industrial development is possible on this basis has been demonstrated by Japan, where the bulk of the industrial labourers are employed in small production units. Japan's largest export industry, silk-reeling, is carried on in little workshops all over the country, or in homes during leisure hours. The chief industrial asset of Japan, as of India, is labour. In fact her resources are scantier than those of India, but by mobilizing—and perhaps exploiting—her large labour force, she has built up a thriving industry and an expanding foreign trade. Even in Europe—especially France and Germany—small industries still play a large part in the economic system. In Germany half the number of industrial workers are employed in handicrafts.

(b) *Agricultural Improvement.* However rapid our industrialization may be, the majority of people in this country will have to draw their sustenance from agriculture. Further, industrial development in this country is necessarily dependent on agricultural improvement. Without a rise in rural purchasing power, the scope for industrial development is extremely limited. On the present basis of consumption, India is rapidly becoming self-sufficient in regard to a good many articles. For raising rural purchasing power, agricultural production must become more efficient and the distribution of agricultural income must become more equitable.

The low productivity in Indian agriculture arises chiefly from certain imperfections in the system of land tenure, rural credit and marketing. By bringing more land under irrigation and by introducing improved methods of agriculture and cattle-breeding, production can be largely increased in India. The use of improved seeds and manures, consolidation of holdings, and the use of electricity will greatly help to make production efficient. For long-term credit, the land mortgage bank must be the chief agency. The high cost of seasonal credit can be reduced and wasteful marketing methods eliminated by the introduction of a system of controlled credit, operated by the co-operative societies under the careful supervision of the Government. The real obstacle to making credit cheap is not merely the money-lender or merchant, but the ryot himself, with all his wasteful habits and improvident ways of living and borrowing. Only by resorting to the harsh methods of the professional moneylender can loans be recovered from many of the agriculturists. Therefore in order to help the ryot, we must cure him of his improvident ways; but this will take time. In the meantime, we must give adequate relief to the burden of debt and devise a system by

which loans will be given almost entirely for productive purposes, and repayment will be provided for through the co-operative marketing of the produce raised. Thus credit must be linked up with marketing. This will reduce the cost of credit and enable the agriculturist to increase production and obtain a larger part of the product. A system of controlled credit has been tried in parts of South India and has been found successful. A campaign for agricultural improvement and the adoption of controlled credit is highly necessary. When the agriculturist becomes creditworthy, interest rates will fall, rural credit function properly and the aid of the Reserve Bank will be readily available to him.

Thus by curtailing the price of credit and by eliminating the wastes in agricultural production, we may reduce costs and maximize income. But the increase of income cannot be very great, unless the agriculturist is enabled to use his spare time productively. It is well known to those who have the least acquaintance with the rural parts that only those agriculturists who have a second string to the bow are able to save anything. It is therefore necessary to devise suitable subsidiary occupations for each area and to give facilities for pursuing them.

Some people believe that all these improvements are only possible by following Soviet or Fascist methods. A totalitarian State would destroy the valuable cultural and spiritual foundations of India and would subject this country to a drab materialism. No doubt a much greater discipline is needed if our people are to advance economically, and a certain amount of compulsion will also be required as a temporary measure; as a British statesman said, it is 'better to sacrifice a certain amount of liberty for a reasonable amount of security.' But this can be done without stamping out freedom. In my opinion, the co-operative method is best suited for improving Indian economic life. Of course, its operations must be extended over a wider sphere than mere credit or consumption. There is great scope in this country for co-operative production, by which many of the economies of the large-scale can be secured for agriculture and handicrafts. Bold measures of colonisation on co-operative lines would greatly relieve rural congestion and middle class unemployment. Not only agricultural colonies but industrial colonies are needed, and the example of Dayalbagh deserves to be widely imitated all over India. In all these ways the labour of the unemployed can be mobilized and an increase in production and national income carried out.

4. Raising the Standard of Living.

An increase of national income is not sufficient to raise the standard of living. The experience of England in the first half of the 19th century shows that a large rise in national income may not bring about a *pro tanto* increase in economic welfare. Income must be more equitably distributed, so that the masses may have greater purchasing power than hitherto. More of the nationaal dividend must stay with the producing and labouring classes. The system of rural credit and marketing suggested above is calculated to improve distribution as well as increase production, seeing that the producer is himself the labourer in most cases. Better tenancy laws are also necessary; the tiller of the soil deserves our concern more than the numerous intermediaries who have come to encumber the land in a *laissez-faire* regime. In industry, statutory provision is needed for assuring to the labourers a minimum standard. A comprehensive scheme of social insurance is needed, and the cultivator must not be left out of it.

Nor is it sufficient to distribute income equitably; we must also see that it is used for better living. The level of living of even well-to-do rural folk is generally very low. Cleaner houses, a more varied diet, better use of leisure, and various other things are necessary to raise the standard of living. This cannot be forced; but a proper education can do much. Hence the importance of the village teacher and the need for training him, so that he can regain his old status in the village.

5. Amelioration through Financial Policy.

The financial policy of the Government can do a great deal to lighten the burdens on the rural population and to tone down the inequities of distribution. It is generally admitted that the system of land tax obtaining in India is regressive seeing that it takes no account of the tax-payer's ability. It presses too heavily on the small-holder and rather lightly on others; and its burdens are much lighter on certain commercial crops than on cereals. The whole system has been vitiated by the recurrence of booms and slumps. Being based on an average of prices for certain years, the assessments become light in periods of rising prices but heavy in periods of falling prices. In order that these anomalies may be removed, the revenue assessment must be regulated according to the crops grown and the level of prices. A readjustment of the burdens according to ability may not greatly reduce the total collection. Nor need this change be

unduly inconvenient for budgeting purposes; if income-tax receipts can vary, there is no reason why land revenue should be the same every year.

Not only land revenue, but our financial system as a whole, stands in need of readjustment in order that it may be approximated to the ideal of maximum social advantage. Various ingrained prejudices and vested interests stand in the way of the adoption of a more equitable system of taxation. This is all the greater reason for using public expenditure as a means of toning down inequalities. At present the bulk of the revenue is spent on security services and their benefits are unequally distributed between the different sections and groups. The defence expenditure may be a great burden to India as a whole, but it is an asset to those Provinces where the bulk of it is expended. Our public expenditure has been bringing about an unfair redistribution of income between economic groups and Provinces, and this must also be rectified.

We have now come to a stage at which the improvement of economic conditions largely depends on a bold increase of expenditure. As Sir Walter Layton points out: "it should be possible to stimulate production and to increase the welfare of the people by public expenditure designed to give greater economic security (by irrigation works, etc.), better physical well-being (sanitation, water-supply, etc.) and education." Taxation for these purposes will not take away money from the people but will add to their purchasing power in many ways. It is strange in these circumstances to hear repetitions of the Gladstonian maxim about leaving money to fructify in the pockets of the people. Kalidasa says that the revenue taken by Dilipa from his subjects went back to them a thousand-fold, even as the vapour from the sea comes back to the earth as fertilising showers.

प्रजानामेव भूत्यर्थं स ताभ्यो बलिमग्रहीत् ।
सहस्रगुणमुत्स्रष्टुमादत्ते हि रसं रविः ॥

This ancient conception of public finance is more in conformity with the latest economic theory than 'the penny-wisdom of Gladstonian finance.' One great difficulty in carrying out such a purpose is the leakage both in taxation and in expenditure inevitable in the peculiar circumstances of India. Owing to an effete economic and social organisation, all the money that the tax-payer pays does not reach the treasury, nor does all the expenditure undertaken by the Government reach the masses. A readjustment of the economic mechanism is therefore necessary.

A good part of the money required for this new policy must come from loans. The loan policy of the Government in India is very conservative. The result is the comparatively light burden of public debt. But the country is crying for drinking water and roads and irrigation works, and it is necessary to quicken the progress of such productive works. The best time to launch such a policy was in 1933 and 1934, when the depression reached the bottom. This would have enabled Government to maintain purchasing power in a time of dire depression and to carry out works at the lowest cost. The Government was sceptical of it, and the commercial bodies were engrossed in the demand for a return to the 16d. ratio, which was in their eyes the sovereign remedy for all the economic ills of this country. Therefore the few economists who recommended a public works programme were not heeded. There is still need for a reconstruction scheme, for slightly different objects.

6. Need for an Active Economic Policy.

For bringing about such a reorganisation of our economic life, the Government will have to follow a much more energetic policy. From the middle of the last century, the Government pursued for long a policy of *laissez-faire* in economic matters, largely under the influence of current English ideas, and this was modified only when famine or other extraordinary disturbances to economic life occurred. The law and the courts were expected to protect the weak against the strong, but, on the other hand, they became agencies in the hands of the resourceful classes to deprive the unwary of their rights. Laws were later made to protect the debtor from usurious moneylending, but such laws are easily evaded. Co-operative societies were established for the same purpose, but their mode of working did not suit the habits of the agriculturists, and rural credit has continued to be largely managed by the private lender in the traditional manner. Agricultural Departments were instituted in all Provinces, and subsequently Industries Departments also, but their sphere of operations remained very narrow till lately and improvements in the methods of the ryot and the artisan have so far been very meagre. Since the establishment of the Imperial Council of Agricultural Research, valuable experiments have been carried out, and it is hoped that arrangements will soon be made so that the ryot may profit by them. The benefits of civilized Government have been reaped mostly by urban classes—merchants, bankers, lawyers, professional men and Government servants—

and the rural masses still remain steeped in ignorance and poverty.

It is the small producer and labourer that need the protection of the State. Large industries and plantations may be expected to look after their own interests, but the small producer, whether agriculturist or artisan, cannot be left to the mercy of the middleman. The State has a special duty not only to control all moneylending and marketing transactions affecting these classes, but also directly to provide such facilities. Takavi is a time-honoured practice and can be expanded to fulfil a wider purpose, and warehousing facilities must also be supplied by the State. Even in England and the U.S.A., where the farmers are more substantial and resourceful, the State is now taking upon itself responsibilities in respect of credit and marketing. As the Businessmen's Commission of the U.S.A. has pertinently pointed out:—

> " Agriculture is not merely a way of making money by raising crops; it is not merely an industry or a business; it is essentially a public function or service performed by private individuals for the care and use of the land in national interest, and farmers in the course of their pursuit of a living and private profit are the custodians of the basis of the national life."

In India, agriculture is not pursued as a business for making money but is the only way of living available to illiterate persons, and therefore if our agriculturists are to fulfil their high public duty, their business must be placed on an economic footing and must give them ample sustenance. This must be the State's immediate task in this country.

A carefully co-ordinated administrative organisation is necessary for carrying out such an active economic policy. The unit of the reconstructed economic life must be the village, or a group of villages. The village school, the co-operative society and the panchayat must become the three pillars of the reformed rural life. Over a wider area will operate the land mortgage bank. As an improvement in the standard of living is our prime need, the co-operative society must be the pivotal institution and must engage itself in the many-sided activities connected with rural uplift. For discharging such responsible duties, a full-time rural guide is necessary in every village, or at least in a group of villages, and men with initiative and character must be carefully selected and trained for this purpose. There are now various departments interested in rural uplift; a more co-

ordinated policy and unified direction are needed if rural uplift is to proceed rapidly. In the present circumstances this is only possible if the District Officer and his assistants are charged with rural welfare as their principal duty. The Departments of Agriculture, Industries and Co-operation are useful in giving technical advice, but for carrying out the policy in the districts there is no better agency than the District Officer and his assistants. With this purpose in view, the recruits to the civil services must be given a more specialized training than is now provided. The shaping of the general economic policy must be done by the Federal and Provincial governments under the advice of competent general staffs. With such an organisation functioning in the country, economic progress can be quickened and efficiency can be secured without the adoption of totalitarian principles.

7. India's Policy in regard to Foreign Trade.

If internal requirements call for an active economic policy, even more pressing is the call from external circumstances. Foremost among these is the persistent tendency to economic nationalism and the drive towards economic self-sufficiency, which to-day are narrowing the scope for India's export trade. Industrial countries in the West are straining every nerve to grow their own foodstuffs and raw materials, partly as a measure of defence and partly with a view to restoring a balance in foreign trade. France which formerly imported much wheat is to-day able to export wheat. Italy and Germany are struggling hard to produce at home synthetic substitutes for various raw materials, and the ablest scientists have been employed by their Governments to achieve this object. India is one of the foremost among the world's primary producers, and raw materials form the mainstay of her export trade. In the last century, indigo was one of our chief export staples; it has disappeared owing to the German invention of artificial dyes. Lac-dye and safflower also met with a similar fate. In other cases, rival products are narrowing down our monopoly. Jute has been a valued monopoly of India; to-day this is being threatened by the growing practice of bulk-handling and the more extended use of paper bags in place of the gunny. India is to-day the largest grower of tea, but its culture has lately been spreading apace and Russia now threatens to flood the world with cheap tea. The chief outlet for our raw cotton is Japan, but that country is trying to make itself independent of Indian cotton. Recent developments abroad have weakened the position of India's cotton and this has already

caused some anxiety. Further, India's competitive position among primary producers is not strong, due partly to our high production costs and partly to our neglect of quality. These tendencies are not such as to encourage optimism about the future of India as a producer for the world market.

The declining trend of population in Western Europe is another feature which ought to cause some concern. Till lately, "the rising tide of general consumption supported by increasing population and improving standards of living in the rest of the world always came along to float the producer's ship off the shoals of temporary maladjustments."[9] But now that population is fast declining and autarchy becoming rampant, demand in Western countries for food and raw materials is bound to slow down, and world trade may become stagnant. The population of Western Europe increased rapidly in the last century, when production was also growing fast; but lately the tendencies have changed and a large decline is expected in the coming decades. Therefore, in every way, the prospects of a growth in our exports to Western markets are far from bright.

At this juncture, India's interest lies in safeguarding her trade with a few steady markets and in developing the internal demand. In order that we may have secure markets, we must (1) improve the quality of our produce by adopting better methods of production and processing, (2) modernise our marketing methods, and (3) enter into trade agreements with our principal customers. It is worth our while, in particular, to secure an increasing hold over the markets in Great Britain (which has been our steadiest market) and the Dominions (whose future possibilities are great). However, a sub-continent like India will always have to depend largely on internal demand. In future, this dependence may unavoidably become more complete, and fortunately, India has a large potential market within the country. Our population is already large and has lately begun to increase rather fast. Our internal market can be greatly extended by increasing the purchasing power of the masses on the lines suggested above.

8. A More Balanced Economy.

In view of the tendencies just described, it must be considered fortunate that, unlike some other primary producing countries

9 Sir George Schuster's Sir George Birdwood Memorial Lectures (*Royal Society of Arts*, March 1935).

(*e.g.*, Java, Australia), India has not evolved a productive system too dependent on external markets. In the 19th century, a growing demand arose for our primary products, and a large increase in the production of rice, wheat, cotton, jute, and oil-seeds took place. But fortunately no part of the country has specialized in the production entirely of export staples; in almost every area there is a wise mingling of food crops with 'cash' crops. Nearly all our cereals, pulses and sugar are consumed at home—and these crops cover 82 per cent of the total cultivated area. The crops raised chiefly for export are tea (84 per cent), coffee (58 per cent) and rubber (82 per cent), but they occupy less than ½ per cent of the total area. It is true that 59 per cent of our cotton, 53 per cent of our jute and 49 per cent of our linseed are exported, but even these cover only 7 per cent of the area, and a good deal more of these commodities will be used up at home when productive activity in this country quickens. Our position is therefore comparatively strong and it is essential that we should maintain this position intact by regulating our production mainly according to internal requirements. In the past, India set too much store on external trade, and this involved a comparative neglect of internal trade. This was disapproved by economists like Ranade in the last century, but the lure of overseas markets was too powerful to resist. Now that this demand is slowing down, it is time we reshaped our whole commercial policy. No doubt external trade must still be our anxious concern, but our productive energy must in future be directed more with reference to internal needs and requirements. Absolute self-sufficiency is not a suitable goal for any nation, not even for a subcontinent like India with all her varied resources. We have to pay our dues abroad by means of our export trade, and even if these diminish, we shall need various goods from outside and we must exchange them for the produce of our labour. The present reckless drive for self-sufficiency will not only weaken world economy but may undermine the foundations of civilized economic life.

India must avoid both the extremes. In other words, we must have a co-ordinated economic system within the country so that we may not be hit when foreign trade fails. Firstly, there must be a balance between industrial and agricultural production. The extreme dependence on agriculture must cease and a larger proportion of people than the present 10·2 per cent must be able to draw their sustenance from industrial occupations. Not only in the whole country but in every province and even district, there must be a balance between agriculture and industry in

order that we may avoid some of the evils rampant in industrial countries. Secondly, our agriculture itself must be a balanced one. That is to say, the diversified cropping which is already a feature of our agricultural economy must be maintained intact and wherever possible there must be a balance between food-crops and other crops. In America, where crop-specialization has been pushed to extremes, a diversification of crops is now sought as a bulwark against slumps. Thirdly, there must be a balance between the different industries so far as possible. The production of an article like cotton cloth or sugar need not be concentrated in one province or area. The indiscriminate springing up of factories must not be permitted; recent tendencies in the Indian sugar industry clearly point to the need for State regulation. The location, size and labour conditions of new factories must be prescribed carefully in the national interest. It would be disastrous to leave industry to the play of unbridled individualism. When protective tariffs are imposed, the State must see that the conditions of production and employment are such as to increase the purchasing power of the primary producers and labouring classes. Otherwise, industrial production might lead to more evil than good. In all these matters, careful co-ordination by the State is essential.

9. The Menace of Growing Population ?

Considering the economic trends in the West, India's large population and its recent increase need not cause alarm to us or to other countries. After the Industrial Revolution, population increased rapidly in the West; and although not immediately, an increase in the *per capita* standard of living also followed. Between 1801 and 1901, the population of England and Wales rose from 8·8 millions to 32·5 millions, but production and national income increased many more times. In 1798, Robert Malthus alarmed England by expounding the 'revolting ratios' of population and food supply, but when he was forging his theory, England was forging ahead with a technical efficiency the like of which had never been known before, and in spite of his gloomy forebodings, England came to maintain a rapidly growing population on a rising standard of comfort. India's position to-day is in many ways like that of England in the time of Malthus. Industrial production has started, but there is still much misery and a low standard of living, and many are alarmed at the growth of population. The first advances in economic development are the slowest, but once the foundations are laid,

the pace will quicken. Population has lately been increasing fast, but "a growing population with growing resources represents a growing market."[10] India's greatest wealth today is its large population, and our duty is not to control births, but to increase the health and productive efficiency of our population and thus utilize our labour force fully, so that the mass standard of living may be raised and along with it the economic welfare of the nation.[11] When productive activity quickens, India's large population will be found to be a great asset. It is significant that the largest increases in population to-day are taking place in Russia, Japan and India. With a substantial rise in the standard of living, the rate of population increase is bound to slow down, as has lately happened in the West. Therefore those who want a smaller population in India would do well to concentrate on the all-important task of raising the standard of living.

When India's purchasing power rises, our growing population will not only be a boon to our home industry, but will also offer a steady market to the products of Western industries. It is true that the imports of ordinary consumption goods have lately fallen much, but the large increase in capital goods will greatly make up the loss. The rapid rise in recent years in the imports (*inter alia*) of machinery and mill-work—which now takes the first place—is significant and ought largely to allay the fears of Western industrialists about the consequences of Eastern industrial development. Nor is this increase temporary; for with every increase in industrial production in India, there will be a greater demand here for capital goods, both quantitatively and qualitatively. With a rise in the standard of living, there will be a great increase in the demand for high-grade consumption goods also. Thus, eastern industrialization may have beneficial repercussions on Western industry at a time when its local markets are stationary or shrinking. Some of the leading Western industrialists have realized this. Henry Ford was asked at a dinner what in his opinion was the way to a stable world recovery. He took his pencil and wrote on the table-cloth the numbers '160,' '350' '400,' meaning thereby the potential purchasing power of the vast populations of Russia, India and China. Had this been more fully realized, benevolent trusts

10 Dr. T. E. Gregory, in Hubbard's *Eastern Industrialization and its effects on the West*, p. 365.

11 See my paper 'Is India Overpopulated'? *New Review*, March and April 1936.

like the Rockefeller and the Carnegie might have spent more money on the economic improvement of India.

10. The Prospect.

I have tried to show that the low level of economic welfare in India is due to a persistent under-production which has kept down the standard of living, and that production can only be increased along with an improvement in distribution. For this, a complete rebuilding of our economic edifice is necessary. I do not recommend a Gosplan, not even a sectional plan like that lately carried out in the United States or New Zealand; because, in my opinion, the social, economic and political conditions of this country are not such as to call for, or facilitate the carrying out of, any such plan. Greater social solidarity, a more complete economic unification, stable political conditions and above all a more solid national character are needed if any such plan is to be put through. We have to go slowly; ours is an uphill task.

Nor can the continuance of *laissez-faire* in the economic sphere be justified. International liberalism is recommended as the way out of the present *impasse* by a neo-Liberal school of economists, but such a system cannot work until some international authority arises to locate industries and apportion markets in an equitable manner. In the meantime, we need a regulated economy, which would eliminate the wastes and rectify the inequities inevitable under individualism. The Keynesian approach is of some practical value in solving our economic problem, but even that only shows the way to maintain full employment irrespective of the trend of the trade cycle. Ours is a different problem, and the environment is also different. We have to create employment in a land where under-employment has been normal and to give new purchasing power to classes that never had it. Economic progress has to be worked up in a land where an unjust economic system has led to stagnation. The problem is very complex, and economic theory as evolved in the West can only give us a very general guidance. Therefore we have to develop an economic synthesis of our own, and this work to-day challenges our subtlest brains.

It is true that in the field of currency and exchange considerable help can be obtained from Western theory and experience for shaping policy in India, but this plays only a minor (although necessary) part in the great task before us. We have to rebuild our economic system without destroying the foundations. What Russia sought to do and did in a monstrous way we must do in

a peaceful manner. It is for us economists to show the way. If we fail, the masses may be misled by interested propagandists.

There are no short-cuts to economic prosperity. Many people believe that India's purchasing power could be raised overnight by a slight change in the exchange ratio. Countries in desperate plight have been driven to a devaluation of their currencies as a last resort, but the consequences they reaped were not all that they desired. It is chimerical to expect that, in the peculiar rural conditions of India, a slight change in the exchange ratio would raise prices, and that even if prices rise the advantage thereof would reach the ultimate producer without hitting him and the country. In dull times it is desirable to give a push to economic activity, but this can be done more effectively and less injuriously by a carefully devised public works programme. To raise prices somehow is not our aim; recent experience shows that attempts at artificially raising prices may do more harm than good. The causes as well as the effects of changes in the price-level are so obscure that the greatest caution is needed in tampering with it. This must be borne in mind by people who seek to raise prices by currency manipulation.

The economic rebuilding of India to-day rests largely with the provincial Governments and the Durbars of Indian States. They have nearly all the powers needed to remove the maladjustments which keep purchasing power and standard of living at a low ebb. They have already started on the campaign for debt relief and agrarian reform. It is expected that after removing the obstacles which now stand in the way of economic progress they will commence a positive programme of reconstruction with the central aim of increasing production and raising the standard of living. This cannot be done in a haphazard manner; it requires careful study and diligent enquiry into local conditions, and in this difficult task, it will be the duty and privilege of economists to give wholehearted support.

India is at a critical stage in her history. By the long operation of an unsound economic system, the resources of the country remain undeveloped, and large sections of the common people are immersed in poverty and misery. They are no longer in a state of pathetic content; under various influences there has been a popular awakening and great expectations have been roused by the introduction of provincial autonomy and the assumption of government by a party which is noted for its rugged idealism. There is a tide in the affairs of nations as well as of men. If we do not seriously tackle our economic ills at this juncture, great discontent and worse consequences may

follow. But if the eleven provincial Governments and the larger States to-day make an earnest effort at rebuilding our economic system on sound lines, the popular awakening may be directed into constructive channels and this country may soon be on the way to solid economic progress. Let it be remembered that any rise in the standard of living of the masses in India will not only increase the economic welfare of a fifth of the human race but will also contribute substantially to the well-being of the world as a whole.

REPORT OF DISCUSSION

(1) Trade Cycle

Dr. H. L. Dey said,

Professor Gadgil had suggested that the technique of recovery that had been devised by Keynes and others was not applicable to India. Dr. Dey agreed that the trade cycle was a phenomenon characteristic of the highly industrialised Western countries, but pointed out that in so far as a trade cycle originating in the West affected India as a supplier of raw materials and in so far as India had been industrialised and her agriculture had been commercialised, a programme of public works and a policy of low rate of interest would stimulate investments in raw materials and stocks on the one hand and in fixed capital on the other and thus bring about recovery, and that this was what the experience of the last six years suggested.

Both Dr. Gyan Chand and Dr. Rao had suggested that under the present political condition and financial organisation of England Mr. Keynes' remedy would be utterly futile. To this Dr. Dey replied that it was true that Mr. Keynes, like many other thinkers, was much in advance of his time. Even so, he expected that the relentless logic of economic facts would gradually convert the politicians and bankers to the doctrines of Keynes, as had been the case with the reparations, the exchange ratio and the gold standard.

Mr. B. Natarajan agreed with Dr. Gyan Chand that Keynes' treatment of the time element in trade cycle was unsatisfactory. According to Keynes, the essence of a cycle is a certain regularity of time-sequence and duration. That alone justifies it being called a cycle. This means that there is a uniformity of time interval not only between the different phases of a cycle, but also between different cycles; in other words, both the wavelength and amplitude must be uniform. This is a over-simplified definition which does not take into account those recurrent and non-periodic cycles whose wave lengths and amplitudes are variable. The Conference on Cycles called in 1922 by the Carnegie Institute has cleared this point beyond a doubt. There, Dr. F. E. Clements laid down, "It seems desirable to use cycle as the inclusive term for all recurrences that lend themselves and period or periodicity for those with a definite time interval, recognizing however that there is no fixed line between the two." But Keynes, as he proceeds in his analysis,

loses sight of the time-element in regard to the frequency of successive cycles or in regard to the different phases in the same cycle, and confines himself to the downward phase of the cycle; and the uniformity of time-sequence and duration which he postulated for the cycle as a whole in the beginning was limited to the downward phase alone. Again, Mr. Keynes assumes three to five years as the length of the upward or downward phase of a cycle. Here he is, no doubt, in agreement with economists like Prof. Jeam Lescure who has formulated the same length of time for the different phases of the cycle in his book, *De Crises generales et periodiques de surproduction.* But Keynes bases his conclusion on an important assumption that the characteristics of capital assets are constant throughout an epoch. Now, what is the "epoch" which Keynes speaks of? How to determine it? How is it reconcilable with the "obsolence" of capital assets which he assumes is ever present? And when Mr. Keynes admits that if the characteristics of the epoch vary there will be a corresponding variation in the length and duration of cycles, does not the constant he assumed originally for time-sequence and duration for the cyclical movement as a whole itself become a variable? Thus Mr. Keynes' postulate of a regularity of time-sequence and duration, while it might apply to particular short-period phenomena, loses all meaning when applied to the long-period movement of cycles as a whole.

Dr. Gyan Chand made a note-worthy contribution when he asked, "Are all countries living in the same epoch so far as this particular point is concerned"? *viz.*, the three to five years' period that brings about a change in the relationship of capital assets to the normal growth of capital. Keynes is, probably, influenced in this by conditions of a few countries that he has closely observed. But there are countries which are in a different stage of economy and where the three-to-five-years' formula would not apply to the relationship between the capital assets and growth of capital. No doubt, Keynes refers to "changing epochs" and this may in defence be stretched as applying to the conditions of those countries also; but it may be asked, "Is epoch a spatial concept?"

Mr. Natarajan concluded by saying that to him Dr. Gyan Chand's paper appeared as a subtle exercise in theoretical criticism and that he was glad to be in entire agreement with the learned professor, particularly with regard to the latter's criticism of the time element in Keynesian analysis of the Trade Cycle.

Prof. Gadgil of the Gokhale Institute of Politics and Economics said: "In connection with the objection raised by Prof. Gyan Chand it should be observed that the pattern of the industrial cycle is determined by events in the main industrial countries of the world. The rest of the world suffers, for the most part passively, from the effects of the cyclical movements. For the purpose of approximately determining the periods of the various phases of the cycle it is, therefore, not necessary that such phenomena, as the period to be allowed for the depletion of stocks, should be uniform all over the world, but only that the length of these periods should be similar in the main industrial countries.

An important point that deserves consideration is that regarding the technique of dealing with the depression. The Indian situation is radically different from that in the industrial countries. With us the fall in purchasing power of the consumers is due not so much to unemployment as to the fall in the prices of agricultural commodities. The volume of our industrial labour is so small that the administration of unemployment relief even on a liberal scale cannot help materially to lift the depression. In the same way a public works policy would not make much impression on the situation. It is difficult to tackle the problem of handicrafts except through the revival of the agriculturist's demand for their products. The proper goal of our policy has, therefore, to be the maintenance of the prices of agricultural products and the chief instrument of our policy for fighting the depression must be a proper exchange and currency policy. The point to be emphasized is that while the analysis of the trade cycle is best conducted in relation to conditions obtaining in the industrial countries, the problem of the technique of fighting the depression must be studied separately for each group of countries and is bound specially to be different for the mainly agricultural countries like ours than for the industrial countries.

Concluding Remarks by the President

The Trade Cycle, said Dr. Thomas, is not confined to an industrial or capitalist civilisation. There have always been booms and slumps; and agricultural countries like India have not been immune from it even before they came to be linked up with industrial countries in the West. In the last century, several parts of India passed through two severe depressions, the one after 1825 and the other after 1865. Of course, booms and

slumps play a larger part in highly industrialized countries depending on external markets, and hence their great importance to Western countries. The world economic crisis of 1929-30 has given a great impetus to economic controversy and today the control of the Trade Cycle is the principal subject of economic controversy. However, the nature of the new theories and the mode of their formulation may not satisfy all. Economists today build their theories on certain assumptions which are seldom realized in the actual world: they have little use of the inductive method which formerly we had been taught to value; they use mathematical equations freely, although the greatest economist of our time, Dr. Marshall, had warned us about the barrenness of the mathematical method. Sir William Beveridge, Director of the London School of Economics, lately said that recent economic analysis was rather like the philosophical speculations of certain mediaeval schoolmen. In his opinion, if economics is to be a fruitful study, we must imitate the natural sciences rather than mathematics or metaphysics. We must deduce our conclusions from statistics.

In India, this is even more important than in the West. Our economic environment is very different from that of Western countries and we have to make an economic synthesis of our own. For this, we require more abundant facts about our economic life than we now possess. Hence the need for accurate surveys of our rural and urban conditions and for a careful analysis of our economic phenomena. For the control of slumps in India, the most effective remedy seems to be a more balanced economy, with greater industrialization and a greater diversification of agricultural production all over the country.

(2) Indigenous Banking

The following members took part: Dr. L. C. Jain, Mr. M. K. Rajagopalachariar, Mr. G. Laxmi Narasen, Mr. A. R. Bhat, Prof. C. N. Vakil, Mr. Kaji Ahmed, Mr. P. K. Sen, Prof. H. Ghosh and Dr. A. I. Qureshi.

Dr. L. C. Jain said,

I wish to speak in regard to four points on Indigenous Banking, namely, definition, indigenous banking in ancient India, its present position, and the future.

As regards the definition of an indigenous banker, I would accept the definition arrived at by the Central Banking Committee

in consultation with the Provincial Banking Committees and a number of Indian economists. That definition is in accord with the one which I had given in my book on Indigenous Banking. Any person who deals in hundis or receives deposits is entitled to be included in the category of a banker, and may be distinguished from a moneylender who does not perform either of these two functions.

Indigenous Banking has been carried on in India for a long number of generations. As explained by Professor Kale in his learned paper, there was a well organised system of Banking in India in the 18th century. There is enough evidence to show that hundi was used even in the 11th and 12th centuries A.D. The Jagat Seths (world bankers) in Moghul times performed some of the functions which are now associated with a central bank. The methods of banking were varied and adapted to the conditions and requirements of the country.

The Indian banker has fallen on evil days in recent years. The result of recent debt legislation in the various provinces of India has been to restrict the borrowing operations and to divert funds from moneylending to certain trade and industries. In so far as there has been a reduction in borrowing for unproductive purposes and more money has been made available to industries, it has undoubtedly been in the interest of the country, even though the bankers and moneylenders have been hit. It does not appear that the borrowers have suffered, as a result of restricted credit in any area to any appreciable extent.

As regards the future of Indigenous Banking, I am an optimist. I believe that Indigenous Banking had a glorious past, and it is destined to play an important part in the future. The Reserve Bank of India has just submitted its Report on the question of Rural Credit and indigenous credit agencies. While the first letter of the Reserve Bank on the subject of indigenous bankers was disappointing, its subsequent attitude is fairly promising. On the other hand, the indigenous bankers are also now beginning to realise the advantages of a connection with the Reserve Bank. Some of them are quite prepared to make necessary sacrifices in order to be linked with the Central Bank of the country. It must not be denied that there is still a certain amount of fear and suspicion on both sides, but the points of difference are getting smaller, and the points of contact getting closer, and this is a happy augury for the future.

Prof. Vakil pointed out that the statement in the Report of the Central Banking Inquiry Committee regarding the indigenous banking was in the nature of a description, which was quite

useful. If this description is carefully looked into it will be seen that all those banking institutions which are now regulated by some legislation or other, are specifically mentioned and excluded from the category of the indigenous bankers. On the other hand various other types of banking institutions existing in the country which are at present not regulated by any law are grouped in the category of indigenous bankers. The logical classification therefore, would be regulated banking institutions and unregulated banking institutions. The problem is how best to regulate these unregulated institutions in the interests of the country. If this was borne in mind the confusion that has been created in the discussion on the definition of indigenous banking need not have existed.

Mr. A. R. Bhat (Kesari-Maharatta Office, Poona) said:

It must be understood that the question of controlling the moneylending profession is quite different from the question of regulating indigenous banking with a view to linking those institutions with the Reserve Bank. So far as the controlling of moneylenders' profession is concerned some of the provincial legislatures have passed laws on the subject and the Congress Governments in the provinces are at the moment busy drafting Moneylenders Bills. But the object of that kind of legislation is to do away as far as possible with the usurious practices of the moneylenders and thus grant relief to helpless debtors. Such legislation cannot be called banking legislation in the sense that the profession of banking proper is regulated by it.

Although there has been no unanimity on the definition of the term "Indigenous Banker" there cannot be any doubt in the minds of those who have thought of this question in its various aspects that there is a distinct class of businessmen carrying on banking on old lines. Although joint stock banking is making good progress in the country it will be very long way off when it will be able to cater for the needs of the rural areas. At present the rural areas are not benefited to any considerable extent by the cheap money rates ruling in organised money markets. On the other hand the Reserve Bank of India, the central banking institution of the country, is not at present linked in any way with the large class of indigenous bankers who finance most of the internal trade.

If, therefore, the banking system of the country is to be co-ordinated, the indigenous bankers must be brought into line with the joint-stock banks by linking them with the Reserve Bank of India. When the Reserve Bank Bill was on the anvil, the Finance Member promised that a way would be found out to

link directly, the indigenous bankers with the Reserve Bank and a provision to that effect has been incorporated in the Reserve Bank Act.

The first circular which the Reserve Bank issued was a disappointing one as it attempted to side-track the main issue. But the protests by Shroffs, another Indian mercantile community, had a salutary effect and the provisional scheme for linking indigenous bankers prepared thereafter by the Reserve Bank is a hopeful document. In that scheme the Reserve Bank has laid down a few important conditions which the indigenous bankers desiring direct relationship with that institution will have to fulfil. Firstly, within a reasonable time the indigenous bankers must agree to give up any other business that they might be conducting. Secondly, they must maintain proper books of account and have them audited by registered accountants. Thirdly, they must file with the Reserve Bank periodical statements and so on.

In my opinion these conditions are not only essential but salutary. Unless the indigenous banker is compulsorily asked to give up other lines of business, development of banking on sound lines will never take place. It may be that in initial stages only a few indigenous bankers will desire direct relationship but by and by as the benefits conferred by the direct association with the Reserve Bank will become visible, more and more indigenous bankers will seek direct recognition of the Reserve Bank. It does not matter if the process of linking the indigenous bankers with the Reserve Bank is slow but it must be on scientific lines.

President's Remarks

The President (Dr. Thomas), concluding the discussions, pointed out that the question of assimilating the indigenous banking institutions of the country into the money market is a most important one to-day. Indigenous banking in India is much older than indicated by some of the speakers. Long before banking developed in the north, the Dravidian south had a well-developed system of banking and credit, as is clear from *Chilapadikaram* and other Tamil works written about 1700 years ago. The Chetti (Sreshti-royal merchant) was a full-fledged banker and operated his bills of exchange over wide stretches of country. According to European travellers (*e.g.*, Tavernier), these Indian bankers were shrewder than even the Jews, the cleverest bankers of Europe. The methods described by Professor Kale have been in vogue for at least a thousand years.

As for the definition of 'banker,' we need not worry very much; all terms have a generic meaning and a special one. The definition of a bank in the company law need not deter us from using that term in the case of classes who have been doing definitely banking work for many centuries.

There is also a necessary distinction between indigenous bankers, and the village moneylenders who lend to rural folk at high rates of interest. The bankers generally finance trade and commerce, and their business terms have been usually reasonable. The village bania's methods are different, and even more injurious are the ways of the itinerant Pathan moneylenders who grind the poor borrowers in some parts of the country.

The lines on which the indigenous bankers must be affiliated to the Reserve Bank are being considered at the present time. On their part, the bankers must regulate their business on prescribed lines, and on the part of the Reserve Bank ancient custom must be honoured so long as it does not go counter to the requirements of modern business. We do need the extensive resources and the accumulated experience of our indigenous bankers, and without their help, agriculture, industry and trade cannot go on properly in this vast country.

(3) UNEMPLOYMENT

Dr. P. S. Lokanathan commenting on Dr. V. K. R. V. Rao's paper said that while he did not deny the practical value of the concept of disguised unemployment, he could not agree that it was an independent factor explaining unemployment. Dr. Rao had suggested that disguised unemployment like, for example, frictional, seasonal or cyclical unemployment, was a distinct type of unemployment of the same order of explanatory causes as those others. In the opinion of the speaker that was not the case at all. The causes that brought about unemployment had nothing whatever to do with disguised unemployment and those were the well-known factors of frictional, seasonal, cyclical and other types. The usefulness of the concept of disguised unemployment lay in the fact that it was a convenient term used by Mrs. Robinson to explain an old phenomenon of a situation in which labour thrown out of work in certain industries got adjusted by employment in less remunerative trades. When, for example, the handicrafts of a country suffered a decline consequent upon the competition of mill products and the workers thrown out of employment, those that resorted to less remunerative employ-

ments, *e.g.*, agriculture, were, no doubt, formally reemployed, but they were now engaged in less productive work and hence in one sense it might be said that their unemployment was disguised. But in any case the cause that had led to this result was entirely due to changes in the conditions of demand and should not be confused with the result itself. Disguised unemployment was therefore the result of changes in effective demand for or supply of labour and in no sense a cause of unemployment.

There was further a danger of exaggerating the value of this concept in its theoretical and practical aspects, especially as applied to old agricultural countries. Unemployment was essentially a problem arising out of a profit-wage relationship. Where there were independent producers, changes in effective demand brought about not unemployment but a decline in incomes. Perhaps the use of the term disguised unemployment to explain short period phenomenon might be justified on the ground that here were people who either continued in an occupation which gave them less return than before or resorted to inferior trades. But if after full readjustment there were too many people occupied in particular industries, thus depressing their income, there would be no point in calling them as disguised unemployed. A more realistic view of the matter would be to regard the problem as one of low productivity and of taking steps to raise it. It was well-known that in India the number of people on land was far too many for the full utilisation of it and that any steps taken to relieve this pressure on the land would be very desirable indeed. Not all the surplus labour on land was the result of the displaced workers from other occupations taking to agriculture. A good deal of it was due to the increased population's inability to find alternative occupations of a more remunerative character. To say therefore, as Dr. Rao did, that the large number of agriculturists who did not contribute to the production of agricultural output constituted the disguised unemployed might be formally correct; but in reality it did not explain the true nature of the problem which was low income and low productivity.

Referring to Dr. Rao's paper, Dr. H. L. Dey stated that while he agreed generally with the author, there was one point on which he had his doubts. Dr. Rao had suggested that the remedy for seasonal unemployment would be the starting of such handicrafts in the villages as would involve little capital and little skill. Theoretically, the suggestion was all right, but its technical limitation was that industries that required little skill, *e.g.*,

spinning, were those which produced simple and standardised goods that satisfied mass demand and which were exactly the industries that gave the largest advantages to machine production as against hand production. Dr. Dey, therefore, thought that a better and more appropriate remedy would be the ruralisation of the lighter machine industries, subject to the condition that while during the agricultural season their operations would normally be on the single shift system, double shifts should be adopted in the slack season of agriculture so as to employ the agricultural labourers. Such ruralisation of industries would also mitigate the general underemployment in the rural areas and raise the average income of agricultural families. He pointed out that the Dhakeswari Cotton Mills at Narayanganj near Dacca had achieved a large measure of success in this direction.

Dr. Rao defines unemployment as inability to find work at a particular wage level. The definition is sound, but the important point that matters is the level taken as the basis of an argument. In India even at the prevailing level of wages, there is an enormous amount of unemployment; but for a vast majority of people employment at the existing level of wages is no employment in the real sense of the word. They live in condition of utter insecurity and suffer from acute distress. The average earnings of our people being what they are, a large majority of them are suffering from disguised unemployment—*i.e.*, they are doing work which brings them much less than they are worth and much less than the minimum necessary to civilized existence.

In India the method of giving relief in the immediate future must be on the lines suggested by Dr. Rao. We must introduce industries in rural areas which will enable people to use their spare time productively. Decentralization of factories, which is already going on to a certain extent, will not be a suitable measure because work in factories cannot be made a part-time or spare-time occupation. The most fruitful method of using the idle hours of agricultural classes is co-operative work to public amenities, and next best, work to producing commodities for self-use. Subsidiary occupations must be simple and their products disposable without raising the complicated problems of marketing and competition.

But the real problem of unemployment cannot be solved without a thorough reconstruction of our economic life. Unemployment among the educated class is only a by-product of unemployment among the masses and both problems can be solved

if conditions favourable for a complete re-organization of our economic life can be created. I need not add that these conditions do not exist at present.

PRESIDENT'S REMARKS

The President (Dr. Thomas) at the conclusion of the discussion, said:—It is true that the statistics of unemployment in India are imperfect, but this need not delay action for relieving unemployment; for, that there is wide-spread unemployment and under-employment is clear on all accounts. Nor need we worry about attaining logical perfection in regard to the classification of unemployment. "Disguised" unemployment may not be an independent class, as was pointed out; but that kind of unemployment is familiar to us in this country where for the last one hundred years handicraftsmen who formerly engaged themselves in skilled industrial work have drifted to less remunerative agricultural labour.

Different remedies are needed for the different types of unemployment prevalent in this country. Perennial under-employment and seasonal unemployment are our chief evils. The former must be tackled by the establishment of suitable home industries which the rural population can carry on, along with their principal occupation. In Japan, silk-reeling is a home industry and occupies men and women in their leisure hours. For seasonal unemployment, seasonal factories may be possible in many areas. It is also necessary to start medium-sized industries in congested rural areas, so that some of the under-employed persons may give up agriculture and become industrial labourers. In slack times, it may be advisable to have co-operative labour ventures for road-making, house-building, etc. Even in farming, co-operative labour can be employed. Co-operative tillage is a means by which the advantages of large-scale production may be reaped in agriculture.

No doubt large-scale industries are needed, but one may be sceptical about the unemployment problem being solved by the establishment of a few heavy industries. Our large-scale industries have lately expanded much, but the increase of employment has been small. For a thickly populated country like India, mainly engaged in agricultural occupations, it would be best to employ as large a proportion of labourers as possible in small and medium-sized industries not far from our farms.

(4) Rehabilitation of Provincial Finance

Prof. C. N. Vakil—In initiating the discussion on this current topic for which no papers have been submitted to the Conference, I propose, after a few preliminary observations, to raise certain issues which may be treated as the basis of discussion.

In any such discussion we are faced with certain difficulties. The first is due to the limitations imposed by the Act on Provincial Governments in connection with their finances. These limitations have been further defined in the Niemeyer Report. The share of the income-tax which has been promised to the Provinces will not be available, so long as the Central Government is not able to improve its finances, which in turn depends on the financial condition of the railways. Provincial prosperity has thus been sacrificed to Central security. The sources available to the provinces are not adequate for the unlimited scope of expenditure which they have, for various schemes of improvement. The problem before the Provincial Governments therefore, has been how to arrange matters under these conditions. In the first place they have thought of retrenchment and economy. There are constitutional limitations in this case also, in as much as the salaries of the Imperial services cannot be reduced by the Provincial Governments. A reduction in the salaries of Provincial Services and a cut in allowances has been thought of. The question is whether it is desirable to have lower salaries than now for Provincial Services which will increase the existing inequality between them and the Imperial Services, and which will also make these services unattractive for future recruits.

The second question which has assumed importance is due to the policy of Prohibition to which Congress Governments have been committed. In consequence the excise department instead of yielding a large revenue will now be a liability. The question arises therefore, whether under present circumstances a policy of Prohibition is financially feasible in the Provinces.

Closely connected with the policy of Prohibition is the educational policy of the Congress Governments. The idea to make primary education up to the Matriculation stage self-supporting is due to the realisation of the fact that the already meagre financial resources of the provinces will suffer substantially because of Prohibition, and that unless entirely novel methods are devised progress in education cannot be achieved. It is the same financial problem which has led to the other idea that higher education is not the concern of the State.

The question arises whether financially the development of education on a self-supporting basis or the neglect of higher education by withholding financial support are sound propositions.

So far as land revenue is concerned, it is generally believed that it is high and presses heavily on certain classes of farmers. Hopes have been raised for some relief in this direction. The question arises whether in view of the loss of revenue on account of Prohibition any substantial relief is possible in land revenue. At the same time proposals have been made for raising more revenue from land by imposing income-tax on large agricultural incomes. The question arises as to how far and in what provinces such an increase is possible.

So far as agriculturists are concerned, other steps are also being taken to help them particularly by schemes of relief from debt. Similarly schemes for better living conditions to industrial workers by means of higher wages, and minimum wage legislation are under consideration. Such schemes aim at a better distribution of national resources. The question however, arises whether the State will be willing to supply credit to the farmer, if the latter's credit shrinks on account of the measures taken by the State.

In view of the difficulties referred to above, additional taxation is inevitable, if the Provincial Governments are going to have adequate resources for their schemes. Among the new sources of revenue that have been either considered already or are likely to be considered the following may be mentioned:

1. Sales taxes;
2. Professions Taxes;
3. A tax on advertisement;
4. A tax on entertainments;
5. A tax on newspaper competitions;
6. A betting tax;
7. A tobacco monopoly;
8. A tax on utility services;
9. Taking over the utility services by the State; and so on.

Either as an alternative to additional taxation or supplementary to it, for certain large schemes of development, the Provincial Governments are likely to be in need of loans. Fresh taxation is unpopular. It is particularly unpopular in our country at the present day when hopes have been raised of a

reduction in taxes. Loans are attractive at the present moment because of the prevailing low rate of interest. The Provincial Governments, however, will have some limitations on their loan programmes. In the case of those governments which are indebted to the Government of India, the previous sanction of the Government of India, is necessary to float a loan. In all cases adequate provision will have to be made for the service of the additional debt. Capital expenditure incurred out of loans may be confined only to those schemes which are likely to yield an adequate return; if this is not possible some taxes may become inevitable to find the additional monies to meet the interest charges on the new debt.

If the financial problem of the provinces cannot be solved by the remedies discussed above, an effort is likely to be made to remove the constitutional difficulties which exist under the Act. In the first place, a change in the distribution of resources between the Centre and the Provinces, more favourable to the Provinces than now may be insisted upon. The capacity of the Central Government to agree to such a change depends on several factors. The first is whether they can reduce their military expenditure. Under the present conditions of the world, it does not seem to be a matter of practical politics for the Government of India to have a substantial reduction in their military budget. The question arises whether the British Government will contribute to the military expenditure of this country, which is partly incurred for Imperial purposes. The second factor on which the capacity of the Central Government to release more revenue to the Provinces depends is its capacity to introduce retrenchment in the salaries of the Imperial Services. The third factor which may help the Central Government is a larger contribution from the Indian States to the Federal Treasury. On the proper adjustment of this and similar issues depends the solution of the financial relations between the Centre and the Provinces.

So far I have thus merely raised several issues or problems which may serve as the basis of discussion, on the question of the Rehabilitation of Provincial Finance. There are bound to be other issues and suggestions which may be made during the course of discussion, but it is evident that in the immediate future, the country is likely to be faced with these problems on the wise solution of which will depend the future economic progress of the country.

The Niemeyer Settlement, though unsatisfactory from different points of view, has to be taken as a given fact. It cannot be changed to the disadvantage of the Provinces which are

alleged to have been discriminated for or against. The only change which can be made is to accelerate the process of transferring central surplus to the provincial exchequers. That depends upon the state of central finances and the immediate time of approach for easing the financial situation in the Provinces must be getting the Government of India, by pursuasion or pressure, to hand over to the Provinces their share of the income-tax receipts and also shape their policy in such a manner as to enable the Provinces to have a share of revenue excise duties as well.

That, however, may or may not happen. The Provinces have in the meanwhile to develope their own resources to the utmost. Reduction of salaries, though a sound policy in itself, cannot afford a material relief because, apart from the practical difficulties of reducing the scales of Imperial Services, there is the problem of revising the salaries of low-paid public servants the solution of which will involve expenditure which will more than offset economies realized through the reduction of salaries.

There is no escape from additional taxation and the only taxes which offer any hope are the income-tax on agricultural incomes, the inheritance tax and the sales-tax. The relative importance of these taxes will vary in the different Provinces but the latter two can be introduced almost in all the Provinces and the first in at least three or four Provinces. The agricultural income-tax must be regarded as a differential tax and rates of the tax should be steeply graduated with a fairly high exemption limit. Even with the development of these taxes the provincial resources will fall short of their needs and it will be necessary to make use of co-operative service for public purposes.

PRESIDENT'S REMARKS

The President (Dr. Thomas), concluding the discussion, said:—It is admitted on all hands that a new financial policy is needed in India. This new policy must aim at raising the standard of living of the masses, by increasing production and improving distribution. Provincial governments must have more funds for such purposes. An opinion has been expressed that a good part of such funds must come from the central exchequer. This is not very practicable, seeing that any large increase in income-tax revenue is not likely in the immediate future. Further, in the present circumstances, the cost of defence is likely to increase rather than diminish. The attainment of self-government would only increase military expenditure, and in addition

we shall need a navy and a large air force to withstand aggression. The funds must therefore come partly by economy in the provinces and partly by fresh taxation. By rationalizing the administrative machinery which has grown up haphazard for a century, we may effect economies in provincial expenditure, especially in the protective services. Fresh taxation must be partly with a view to adjusting the inequities in the existing economic system. Taxes on inheritance and an income-tax on agricultural incomes seem justified. A tax on tobacco and a sales-tax are also possible elastic sources of fresh taxation. Public utilities must be utilized for bringing in revenue. Several of them can be conducted by the State. In certain Western countries, matches are a source of gain to the State. In this country, we have given too much room for private enterprise. The State has to examine, in every case, how far it could directly manage public utilities efficiently, so that the non-tax revenue of Government may be increased.

The Role of Economists.

In the rehabilitation of provincial finances and in drawing up new policies, economists have a duty to co-operate with Government. There is a prevalent view, not only in Government circle but among politicians and businessmen that Indian economists are mere theorists. This may be true of a large number of economists in this country; but the proportion of such economists is perhaps larger in other countries. Even in Great Britain, only a few economists have taken interest in practical problems, and some of the leading economists are confining themselves to pure theory. For instance, only recently have economists in England thought of carrying out economic surveys. In India, thanks to the wisdom of our pioneers, practical questions always loom large in the discussions of economists. It may be that these discussions have often been coloured by political prejudices, but there are many economists in this country who have carried out economic investigations with an impartial aim. Detailed surveys of economic conditions have also been carried out. Let us hope that the number of such studies will increase in future. What we need is not mere theoretical speculation but impartial enquiry into practical problems in order that statesmen may be enabled to formulate economic policies properly. When such work is done and done well, the prejudices against Indian economists will disappear and Governments will seek the co-operation of associations like ours.

The President, continuing, paid a tribute to H. E. H. the Nizam for his gracious message and for the kindly hospitality extended to the Conference. The Rt. Honourable Sir Akbar Hydari laid the Conference under a heavy debt for his very helpful inaugural address. The Association owed a deep debt of gratitude to H. E. H. the Nizam's Government for so successfully arranging for the conduct of this year's Economic Conference.

INDIAN ECONOMIC ASSOCIATION

Twenty-First Session, Osmania University,
December, 1937

The Annual General Meeting of the Indian Economic Association was held in the Osmania University Buildings on the 31st December, 1937, at 9 A.M.

PRESENT:

1. Dr. P. J. Thomas, M.A., B.Litt., D.Phil., M.L.C., President.
2. Prof. V. G. Kale.
3. Prof. C. N. Vakil.
4. Prof. L. C. Jain.
5. Prof. Gyan Chand.
6. Prof. H. L. Dey.
7. Mr. G. Lakshminarasu.
8. Mr. S. A. Samad.
9. Mr. Premchand.
10. Mr. A. Mohiuddin.
11. Mr. B. Ranga Reddi.
12. Mr. Mohamed Foroor.
13. Mr. Khwaja Hameed Ahmad.
14. Prof. H. Rahman.
15. Prof. S. M. Shafi.
16. Prof. Jaffar Hasan.
17. Prof. V. K. R. V. Rao.
18. Prof. J. Guleri.
19. Prof. K. H. Kamdar.
20. Mr. Ganesh Rao Thattle.
21. Mr. Syed Akhtar Husain.
22. Mr. K. C. Chari.
23. Mr. A. Razakkhan.
24. Mr. M. Ali Khan.
25. Mr. I. Khaleel.
26. Mr. D. G. Karve.
27. Mr. D. R. Gadgil.
28. Mr. A. R. Bhat.
29. Mr. A. N. Mallik.
30. Mr. M. O. Badheka.

31. Miss A. John.
32. Mr. B. Ranganadan.
33. Mr. Joseph N. Reuben.
34. Mr. W. B. Raghaviah.
35. Mr. B. Govinda Rao.
36. Mr. M. L. Patel.
37. Mr. M. K. Rajagopalachari.
38. Mr. H. Ghosh.
39. Mr. J. R. Shroff.
40. Mr. U. Bhatnagar.
41. Mr. M. K. Munisami.
42. Dr. P. S. Lokanathan.
43. Mr. Anwar Iqubal Qureshi.
44. Dr. B. V. Narayanaswamy.
45. Mr. A. L. Razvi.
46. Mrs. M. R. Janaki.
47. Mr. M. Abdul Qadir.
48. Mr. Kesari Singh.
49. Mr. W. A. Shah.

1. The Minutes of the last Annual General Meeting held at Agra were confirmed.

2. The report of the Hony. Secretary and Treasurer and the Auditor's statement of accounts for the year ending 31st May, 1937, were considered and approved.

3. The University of Madras and the Nagpur University had expressed their readiness to invite the Economic Conference next year. In view of the general practice of preferring invitations from new centres, the invitation of Nagpur University was gratefully accepted and Madras University was thanked.

4. The following subjects were selected for discussion at the next Conference:—

1. Theory of Interest.
2. Debt legislation—History and Recent Developments.
3. Commercial Agreements with special reference to India.
4. A current topic.

5. The following office-bearers were unanimously elected for 1937-38:

President:—Dr. Gyan Chand, Patna University.

Hony. Secretary and Treasurer:—Dr. B. V. Narayanaswamy Naidu, Annamalai University.

Hony. Local Secretary:—Prof. Sen Gupta, Nagpur University.

Members of the Executive Committee

1. Prof. P. J. Thomas, Madras University.
2. Hon. Mr. Manohar Lal, Lahore.
3. Prof. V. G. Kale, Poona.
4. Prof. R. K. Mukerjee, Lucknow University.
5. Prof. C. N. Vakil, Bombay University.
6. Prof. L. C. Jain, Punjab University.
7. Prof. J. P. Niyogi, Calcutta University.
8. Prof. L. K. Hyder, Aligarh University.
9. Prof. H. L. Dey, Dacca University.
10. Mr. H. Rahman, Osmania University.
11. Prof. S. K. Rudra, Allahabad University.
12. Prof. V. K. R. V. Rao, Ahmedabad University.

6. It was decided that notice be served for the termination of the contract with the Allahabad University for printing and publishing the Journal with the object of reviewing the whole contract at the end of the year.

7. It was decided that in future members of the Association be requested to send 250 printed copies of the paper offered to the Conference to the Local Secretary on or before the 1st December of the year, and that the pre-printing copies of the Conference Number be suspended.

8. A Committee was appointed for finding out ways and means for extending the activities of the Association by the formation of local study centres. The following members were elected with powers to co-opt:—

Dr. Gyan Chand.
Mr. M. K. Rajagopalachari.
Dr. B. V. Narayanaswamy Naidu.

9. The meeting terminated with a vote of thanks to the Osmania University and the President.

P. J. Thomas,
President.

B. V. Narayanaswamy,
Hony. Secretary.

THE INDIAN ECONOMIC ASSOCIATION

Report for the year ending 31st May, 1937.

The number of members on the 31st May, 1937 was 165 as compared with 176 in 1936, 192 in 1935 and 145 in 1934. Efforts are being made to raise the membership, and it is hoped that the figure for 1938 would exceed 1937.

The financial position of the Association continues to show steady improvement. From Rs. 2,942-13-3 on the 31st May, 1936, the cash balance increased to Rs. 3,328-13-11 (after deducting Rs. 346-11-7 being the amount due to the Department of Economics, Allahabad University) on the 31st May, 1937. Besides, in accordance with the agreement regarding the Journal between the Association and the Allahabad University, there is a joint reserve fund of Rs. 1,881-7-2. The cash balance includes Rs. 3-2-5 on account of the share of the Association in the profits of the Journal for the year, as against Rs. 78-1-4 for 1935-36. The payment by the Association on account of the Conference number of the Journal for pages exceeding 200 was Rs. 404-8-0 last year, but for the Conference number the Agra Economic Conference made a generous donation of Rs. 150. The Journal Office has credited Rs. 69 to the Indian Economic Association after meeting the cost of extra pre-printed papers. The audited statement of accounts is attached herewith.

I am greatly indebted to the President, the members of the Executive Committee and to Dr. L. C. Jain for their valuable guidance in all matters.

Annamalainagar,
December 22nd, 1937.

B. V. Narayanaswamy,
Honorary Secretary.

THE INDIAN ECONOMIC ASSOCIATION

Receipts and Payments Account for the year ending 31st May, 1937

RECEIPTS.

	Rs.	a.	p.	Rs.	a.	p.
To Opening Balance:						
(*a*) Fixed Deposit	1,103	0	0			
(*b*) Savings deposit	2,065	3	4			
(*c*) Current account	358	14	1			
(*d*) Cash with Secretary ...	24	0	0			
	3,551	1	5			
Less Amount paid to Department of Economics, Allahabad University ...	608	4	2	2,942	13	3
" INTERESTS:						
On Fixed Deposit	27	9	0			
On Savings Deposit a/c	41	8	0	69	1	0
" SUBSCRIPTIONS FROM MEMBERS:						
165 Members @ Rs. 12 each ...	1,980	0	0			
Less received in advance last year ...	12	0	0	1,968	0	0
" ADVANCE SUBSCRIPTION:						
4 Members @ Rs. 12 each				48	0	0
SUNDRIES:						
Authors' Contribution to Conference number				42	8	0
Donations				169	0	0
Miscellaneous				6	4	0
Share of Profit from the Journal				3	2	5
Total				5,248	12	8

PAYMENTS.

	Rs.	a.	p.	Rs.	a.	p.
By Department of Economics, University of Allahabad for 125 members @ Rs. 9 each and 40 members @ Rs. 8 each including one life member ...	1,445	0	0			
" Cost of Journal (Conference number)	323	8	0			
" Expenditure on 30 refused journals ...	9	6	0			
	1,777	14	0			
Less Amount not paid	346	11	7			
	1,431	2	5			
" Clerical assistance	75	0	0			
" Printing and Stationery	10	10	0			
" Postage	46	0	9			
" Miscellaneous expenses	10	6	0	1,573	3	2
" CLOSING BALANCE:						
Cash at Bank & on hand:						
(*a*) Fixed deposit with the Bombay Provincial Co-op. Bank, Ltd., Bombay	1,130	8	0			
(*b*) Savings deposit a/c with The Punjab National Bank, Ltd., Lahore	2,106	11	4			
(*c*) Current a/c with The Central Bank of India, Ltd., Lahore ...	373	9	8			
(*d*) Cash with Hony. Secretary ...	64	12	6	3,675	9	6
Total				5,248	12	8

AUDITOR'S REPORT:—Audited and found correct. Rs. 346-11-7 is due to The Department of Economics, Allahabad University, after adjusting the Share of Profit due by them. Interest accrued on Fixed and Savings deposits has not been brought to account.

MADRAS,
Dated 19—12—1937.

(Sd.) B. BAKTHAVATSALU, B.A., G.D.A., R.A.,
Registered Accountant and Hony. Auditor.

B. V. NARAYANASWAMY,
Hony. Secretary.

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